

## 2002 ANNUAL EXHIBITION

Imperial College, London SW7—9 November 2002

The following account of exhibits has been compiled by A. M. Jones (British butterflies), G. A. Collins (British Macrolepidoptera), H. E. Beaumont (British Microlepidoptera), N. M. Hall (foreign Lepidoptera), P. J. Chandler (Diptera), P. J. Hodge (Coleoptera), A. J. A. Stewart (Hemiptera), A. J. Halstead (Hymenoptera and other Orders) and J. S. Badmin (general). The photographs of individual insects were taken by R. A. Jones and the cost of printing these was met by a grant from the Hammond Memorial Fund. Specimens illustrated are natural size unless stated.

Exhibits under the theme "Wetland Insects" were invited as part of the Annual Exhibition. The notes on these exhibits have been incorporated in the usual categories, but, where appropriate, mention has been made if specimens were exhibited under this theme.

## BRITISH BUTTERFLIES

BAILEY, K. E. J.—Results of genetic and temperature experiments 2001–2002. *Pararge aegeria* (L.), four specimens with varied underside pattern from pre and early pupae held at 30°C for several days in high humidity. Uppersides included one with an unusual balanced bleached effect to the forewings.

*Enphydryas aurinia* (L.), a normal coloured specimen and an ab. *atratus* Bailey both with atypical markings in the forewing cell area possibly due to inbreeding. A specimen with areas of *atratus* on the underside left forewing. An unusual example with the underside hindwings' basal orange area devoid of pattern. A pair of ab. *virgata* Tutt and a pair of *virgata* + *atratus* the result of selective breeding. Two ab. *sebaldis* Schultz, from cold-shocked pupae. Also from cold-shocked pupae was a series of extreme melanics of *Argynnis paphia* (L.) including ab. *nigrizina* Frowhawk. Late cold shock to inbred stock of *Argynnis adippe* (L.) resulted in a male with peripheral forewing melanism. *Vanessa atalanta* (L.) ab. *klemensiewiczzi* (Schille) from heat-shocked pupa reared from a wild caught female, Devon, ix.2001.

An interesting series of *Aglais urticae* (L.) including two extreme examples of the polygenic ab. *connexa* Cabeau. An extreme specimen from this stock, ab. *conjuncta* Meuberg + ab. *connexa* from a heat-shocked pupa (Fig. 1). Strong examples of an apparently new, variably expressed recessive aberration with brown suffused underside forewings. This appeared in the *connexa* stock in 2001, but had a severe weakening effect. A specimen with the brown suffusion on the right hand side only.



Fig. 1. *Aglais urticae*, ab. *conjuncta* + *connexa*, bred, K. E. J. Bailey.



Fig. 2. *Aglais urticae*, possible gynandromorph, bred, K. E. J. Bailey.

and with an imbalance in the length of the first legs, possibly a gynandromorph (Fig. 2). Also two specimens of *ab. semiichuusoides* Pronin. from heat-shocked pupae, ex wild Devon larvae.

*Anthocharis cardamines* (L.) a male *ab. sriata* Pionneau and two female *ab. crassipunctata* Mezger from long cold shock of prepupae and pupae.

*Colias croceus* (Geoffroy), a series reared from a typical Devon female, the pupae were stored at 5°C for about 20 days then returned to room temperature. One specimen was a small female *ab. electra* Frowhawk, the remainder had extended yellow within the black borders and with slightly melanistic undersides resembling the European species *Colias hecla sulitelma* (Aurivillius).

Also exhibited were two wild-taken *Melanargia galathea* (L.) *ab. valantini* Watkins from a remote Devon site, July 2002, and a male *Mesoacidalia aglaia* (L.) with bleached white spots on the left hand wings from N. Devon July 2002.

HARMER, A. S.—Butterflies from the Scilly Isles, August 2002. *Maniola jurtina cassiteridum* (Graves) bright examples, including a female underside transitional to *ab. fracta* Leeds. *Pararge aegeria insula* (Howarth), some very orange approaching true *aegeria aegeria* (L.) *Polyommatus icarus* (Rott.), including a female *ab. basijuncta* Tutt and *ab. costajuncta* Courv.

Bred *Colias croceus* (Geoffroy), including specimens with pale yellow scaling on the forewing costa and undersides with slightly extended pink markings down the veins on the forewings.

HUMPHREY, D. A.—The highlight of specimens from Dorset and South Wiltshire between 1990 and 1999 was a *Callophrys rubi* (L.) extreme brown underside, *ab. brunnea* Tutt (Fig. 3) taken Stubhampton Bottom, 14.v.1991. Also exhibited were female *Lysandra coridon* (Poda) *ab. radio* Leeds and *ab. obsoleta* Tutt. A male *Melanargia galathea* (L.) *ab. grisescens* Varin. *Maniola jurtina* (L.) *ab. post-radiata* Frowhawk, and other minor aberrations. Two pairs of *Pyronia tithonus* (L.) *ab. excessa* Tutt. A female *Aphantopus hyperantus* (L.) *ab. cuneata* Gilmer.

JONES, A. M. & R.—*Quercursia quercus* (L.) Three female aberrations bred June 2002, *ab. obsoleta* Tutt, a specimen with homoeosis to the underside of the right hindwing, and an extreme *ab. latefasciata* Courvoisier.

A chance breeding of *Polyommatus icarus* (Rott.) *ab. pallida* Tutt from a heavily spotted female taken vi.2002, the F<sub>1</sub> showed specimens with slightly heavier markings. An F<sub>2</sub> of 159 in September/October, comprised 77 males and 82 females, of which 8 males (4 crippled) and 5 females (3 crippled) were *ab. pallida* (Fig. 4), approximately 8%. The aberration corresponds to a similar form in *Lysandra coridon* (Poda) proved to be a simple recessive.

Results of breeding from a female *Boloria euphrosyne* (L.) *ab. stramineus* Frowhawk. A freshly emerged female *ab. stramineus* was paired with a typical male in captivity. The F<sub>1</sub> in May 2001 were all type. The F<sub>2</sub> reared in May 2002 comprised 62 specimens, 27 typical males, 25 typical females, 2 pale males (both crippled), 7 pale females (4 crippled) and one somatic mosaic female with pale patches on the upper and underside of an otherwise typical coloured specimen (not pathological).



Fig. 3. *Callophrys rubi* *ab. brunnea*, Stubhampton Bottom, Dorset, 1991, D. A. Humphrey.

The results show that 14.5% of the brood were pale, it is likely that some of the aberrations died in the pupa, the gene seemed to have a serious weakening effect (6 of the 9 aberrations were crippled). It is assumed that the ab. *stramineus* is a recessive form but further breeding will be necessary to prove this.

Continued results of breeding from a homoeotic female *Argynnis paplia* (L.). Subsequent broods to an F<sub>1</sub> generation exhibited at the 2001 exhibition. Homoeotic male × homoeotic female, a brood of 132 specimens, 64 (48.5%) showing homoeosis. Homoeotic male × typical *valesina* Esper female, a brood of 85 specimens, 28 (33%) showing homoeosis. Typical male from homoeotic/*valesina* stock × typical *valesina* from homoeotic/*valesina* stock, a brood of 13 specimens, 4 (31%) showing homoeosis. Also two miscellaneous broods from homoeotic stock (parents undetermined) one comprising 12 specimens, 7 (58%) showing homoeosis, the other comprising 10 specimens, 6 (60%) showing homoeosis. The results are difficult to interpret, many specimens only showed very minor homoeosis, breeding from the most extreme examples did not result in more extreme progeny, the most extreme example came from a small miscellaneous brood.

*Boloria euphrosyne* (L.) An extreme, possibly unique homoeotic female (Fig. 5) with a large portion of the underside right hindwing markings replaced with those of the forewing, captured 12.v.2002. A male *Maniola jurtina* (L.) ab. *alba* Blackie, captured in West Sussex, 17.viii.2002.

SIMPSON, M.—A specimen of *Nymphalis antiopa* (L.), captured in a green house at Ramsey, Cambridgeshire (VC 31) 10.ix.2002, following a telephone call from one of the exhibitor's friends. The specimen had been in the green house for two days prior to capture and was first noticed after a heavy rain storm, from which it may have been taking shelter.

#### BRITISH MACROLEPIDOPTERA

AGASSIZ, D.—An asymmetrical aberration of *Spilosoma lubricipeda* (L.), Gravesend, W. Kent, 15.vi.2002.

BAKER, P. J.—Moths from the West Hill area, S. Devon: *Costaconvexa polygrammata* (Borkh.), 23.ix.2000; *Cyclophora puppillaria* (Hb.), 15.x.2001; *Hyles livornica* (Esp.), 30.v.2002; *Trachea atriplicis* (L.), 5.vii.2002; *Eilema caniola* (Hb.), 5.x.2002; *Lithosia quadra* (L.), 30.ix–2.x.2002, seven examples; and *Deileptenia ribeata* (Cl.), 10.x.2002.

BEAUMONT, H. E.—New vice-county records of moths: *Parascotia fuliginaria* (L.), Misson Carr, Notts., 17.viii.2002; *Lithostege griseata* (D. & S.), Spurn, S.E. Yorks.,



Fig. 4. *Polyommatus icarus* ab. *pallida*, bred F<sub>2</sub>, 2002, A. M. Jones.



Fig. 5. *Boloria euphrosyne*, homoeotic form, 2002, A. M. Jones.



7.vi.2002 (C. Jones leg.); *Archana sparganii* (Esp.), Spurn, S.E. Yorks., 7–13.viii.2002 (B.R. Spence leg.). A moth new to Britain: *Nycteola asiatica* (Krul.), Kilnsea, S.E. Yorks., 11.ix.2002 (B.R. Spence leg., gen. det. HEB) (Fig. 6).

BELL, R. A.—*Trachea atriplicis* (L.), Northwood Park, N. Hants, 12.vii.2002. Examples of both *Abrostola triplasia* (L.) and *A. tripartita* (Hufn.) from Northwood Park. A series of *Megalographa biloba* (Steph.) reared on organic lettuce.

BUTTERFLY CONSERVATION (GREEN, D. G., PARSONS, M. S. & DAVIS, A. M.)—Details of the Action for Threatened Moths Project. Reviews of the current status of UK Biodiversity Action Plan Priority Species, with a summary of selected projects undertaken in 2002 designed to contribute towards their conservation.

CLANCY, S. P.—Immigrant moths from the Dungeness area, E. Kent: *Actinotia polyodon* (Cl.), New Romney, 28.v.2002; *Cleorodes lichenaria* (Hufn.), Greatstone, 28.vii.2002; *Euxoa cursoria* (Hufn.), Littlestone, 28.vii.2002; *Drepana curvatula* (Borkh.), 28.vii.2002, one at Dungeness and one at Lydd; *Notodonta tritophus* (D. & S.), Lydd, 3.viii.2002; *Peribatodes ilicaria* (Geyer), Littlestone, 3.viii.2002; *Amphipoea lucens* (Freyer), Lydd, 8.viii.2002 and Dungeness, 9.viii.2002; *Cryphia algae* (Fabr.), Littlestone, 14.viii.2002; *Macdunnoughia confusa* (Steph.), New Romney, 16.ix.2002; *Chrysodeixis chalcites* (Esp.), New Romney, 1.x.2002. Species of uncertain origin from the same area: *Hecatera dysodea* (D. & S.), Greatstone, 24.vii.2002; *Clostera anachoreta* (D. & S.), New Romney, 6.viii.2002; and *Scopula nigropunctata* (Hufn.), near Charing, 16.vii.2002. Aberrations, including *Omphaloscelis lunosa* (Haw.), Dungeness, 7.x.2002 (Fig. 7).



Fig. 6. *Nycteola asiatica*, Kilnsea, S.E. Yorks., 2002. H. E. Beaumont.



Fig. 7. *Omphaloscelis lunosa*, Dungeness, Kent, 2002, S. P. Clancy.

CLARKE, J. H.—Immigrant moths from W. Corn, including: *Orthonama obstipata* (Fabr.); *Lithosia quadra* (L.); *Mythimna loreyi* (Dup.); and *Helicoverpa armigera* (Hb.). *Eilema caniola*, East Grinstead, E. Sussex, 21.viii.2002. Notable species from Crawley Down, E. Sussex: *Cyclophora porata* (L.), 13.viii.2002; *Xanthorhoe biriviata* (Borkh.), 20.vii.2002; *Anticollis sparsata* (Treit.), 12.vii.2002; *Abrostola triplasia* (L.), 13.viii.2002; and *Parascotia fuliginaria* (L.), 10.vii and 5.viii.2002.

CORLEY, M. F. V.—An aberration of *Diaphora mendica* (Cl.), Faringdon, Berks., 17.v.2002 (Fig. 8).

DOBSON, A. H.—From Greywell, N. Hants (P. A. Boswell leg.): *Acronicta alni* (L.) ab. *melanica* Schulze, 2.vi.2002; and an autumnal *Orthosia cerasi* (Fabr.), 10.xi.2001.

GLAMORGAN MOTH RECORDING GROUP (SLADE, D. J.)—A brief history of the recording group together with a selection of newsletters and a request for records from VC41.



HALL, N. M.—A dark example of *Lithophane hepatica* (Cl.), Earley Lake, Berks., 9.viii.2002. *Archana sparganii* (Esp.), Hastings Country Park, E. Sussex, 28.viii.2000, an adult found floating on a leaf in a small pond.

HALSEY, J.—Immigrant moths taken at Bonchurch, Isle of Wight, in 2001 and 2002: *Catocala fraxini* (L.), 20.ix.2001 and 25.ix.2001; *Trichoplusia ni* (Hb.), 6.viii.2002; *Hyles livornica* (Esp.), 28.iii.2002; *Trigonophora flammea* (Esp.), 10.x.2002; *Trisateles emortualis* (D. & S.), 19.vi.2002 and *Uresiphita polygonalis* (D. & S.), 21.x.2001.

HARMAN, T. W.—Aberrations and local forms of moths: *Emmotos quercuaria* (Hufn.), "Chilterns", 2002; *Spilosoma lubricipeda*, Truro, Cornwall [vice-county not stated], 26.vi.2001, and Turville Heath, Bucks., 8.vi.2002 (Fig. 9); *Couistra rubiginosa* (D. & S.), Turville Heath, Bucks., 2.iv.2002; *Colocasia coryli* (L.) ab. *melanotia* Haver, Turville Heath, Bucks., 24.iv.2002; and *Perizoma alchemillata* (L.), Turville Heath, Bucks., 24.vii.2002.

HART, C.—An example of *Xestia rhomboides* (Esp.), Devil's Dyke, Poynings, W. Sussex, 3.viii.2002. Immigrant moths: *Heliothis armigera* (Hb.), Mullion, W. Cornwall, 18.ix.2002; and *H. peltigera* (D. & S.), Buckland, Surrey, 18.vi.2002.

HAYWARD, R.—Immigrant moths from Slough, Bucks.: *Rhodometra sacraria* (L.), 2.ix.2002; *Heliothis peltigera* (D. & S.), 20.vi.2002. Moths from Two Bridges, S. Devon, including: *Scopula teruata* (Schr.), 15.vii.2002; *Eupithecia fraxinata* Crewe, 16.vii.2002; and *Lacanobia contigua* (D. & S.). Moths from Slough, Bucks., including: *Furcula bifida* (Brahm), 3.vi.2002; *Eilema griseola* (Hb.), 30.vii.2002 and 6.viii.2002; *Mythimna straminea* (Treits.), 27.vii.2002; and *Xanthia gilvago* (D. & S.), 30.ix.2002.

HENWOOD, B.—Photographs of overwintering, penultimate and final instar larvae of *Bea bicolorana* (Fuess.) showing crypsis varying according to the state of an oak tree. An example of *Hyles livornica* (Esp.), Dawlish Warren, S. Devon, 27.vi.2002. *Photodes morrisii morrisii* (Dale), Culverhole Point, S. Devon, 26.vi.2002.

HONEY, M. R.—A specimen of *Catocala urophaga* (Esp.) taken at a light trap in the garden of Buckingham Palace, Middx., 5.ix.2002. A selection of moths from the Wetland Centre, Barnes, Surrey, including: *Semiaspilates ochrearia* (Rossi); *Lacanobia suasa* (D. & S.); *Mythimna straminea* (Treits.); *M. obsoleta* (Hb.); *Apamea maura* (Hb.); *Celaena leucostigma* (Hb.); *Archana genuinipuncta* (Haw.); *A. dissoluta* (Treit.); *A. sparganii* (Esp.); *Rhizedra lutea* (Hb.); and *Chilodes maritimus* (Tausch.).

KNILL-JONES, S.—Moths from Freshwater, Isle of Wight, including: *Schrankia costaeistrigalis* (Steph.), 6.vi.2002; *Eupithecia millefoliata* (Rössl.), 28.vii.2002;



Fig. 8. *Diaphora mendica*, Faringdon, Berks., 2002, M. F. V. Corley.



Fig. 9. *Spilosoma lubricipeda*, Turville Heath, Bucks, 2002, T. W. Harman.

*Orthonama obstipata* (Fabr.), 6.vi and 22.vii.2002; and *Heliothis armigera* (Hb.), 29.x.2002.

KOLAJ, A.—Moths from Scotland, 2001–2002, including: *Hyppa rectilinea* (Esp.), mainly at light; *Xestia alpicola alpina* (Humph. & West.), reared from pupae; *Anarta melanopa* (Thunb.); and *Itame brunneata* (Thunb.).

LANGMAID, J. R.—An example of *Cryphia algae* (Fabr.), Southsea, S. Hants, 26.viii.2002.

MCCORMICK, R. F.—Interesting moths from Devon, 2002, including: *Cymatophorina diluta hartwegi* (Reiss.), Boro Wood, Ashburton, S. Devon, 11.ix.2002; *Eupithecia phumbeolata* (Haw.), Hembury Woods, Buckfastleigh, S. Devon, 22.vi.2002 (B. Henwood & B. Bewsher leg.); *Abraxas sylvata* (Scop.), Holcombe, S. Devon, 26.vii.2002; *Leucoma salicis* (L.), Countess Wear, Exeter, S. Devon, 25.vii.2002 (P. Butter leg.); *Lithosia quadra* (L.), Hembury Woods, Buckfastleigh, S. Devon, 27.vii.2002 (B. Bewsher leg.); *Aporophyla lutulenta* (D. & S.), Countess Wear, Exeter, S. Devon, 27.ix.2002 (P. Butter leg.); *Xanthia citrigo* (L.), Countess Wear, Exeter, S. Devon, 1.x.2002 (P. Butter leg.); *Dypterygia scabrinscula* (L.), Buckland Brewer, Bideford, N. Devon, vii.2002 (S. Hatch leg.); and *Schrankia taenialis* (Hb.), Boro Wood, Ashburton, S. Devon, 3.viii.2002, and Shaugh Wood, Plymouth, S. Devon, 15.vii.2002 (P. Butter leg.).

NASH, S.—Immigrant moths from Durlston Head, Swanage, Dorset: *Orthonama obstipata* (Fabr.); *Acherontia atropos* (L.), 20.x.2002; *Hippotion celerio* (L.), 31.x.2002; *Euplagia quadripunctaria* (Poda), 13.viii.2002; *Trichoplusia ni* (Hb.), 3.ix.2002; *Mythimna albipuncta* (D. & S.); *M. vitellina* (Hb.); and *M. unipuncta* (Hb.). Immigrant moths from Coverack, W. Cornwall: *Rhodometra sacraria* (L.); *Orthonama obstipata* (Fabr.); *Mythimna vitellina* (Hb.); *M. unipuncta* (Hb.); and *Ochropleura leucogaster* (Frey.), 12.x.2002. Moths from Fernham, Berks., including: *Idaea rusticata* (D. & S.), 28.vii.2002; *Colostygia multistrigaria* (Haw.), 18.iii.2002; and *Eupithecia egenaria* (H.-S.), 7.vi.2002.

PARSONS, M. S.—An aberration of *Xanthorhoe fluctuata* (L.), Shaggs, Dorset, 22.viii.2002.

PHILLIPS, J. W.—A selection of moths reared or caught during the year, including: *Deltote bankiana* (Fabr.), Wicken Fen, Cambs.; *Charissa obscurata* (D. & S.), Portland, Dorset; and *Spilosoma urticae* (Esp.), Romney Marsh, E. Kent. *Hyles livornica* (Esp.), Hayling Island, S. Hants., 7.viii.2002 (J. Durnell leg.).

PICKLES, A. J.—On behalf of A. Butterworth, an adventive example of *Chrysodeixis acuta* (Walk.) which emerged from a bunch of chrysanthemums bought in Brookenhurst, S. Hants.

ROUSE, T.—A selection of aberrant moths, including *Idaea aversata* (L.), Densole, E. Kent, 28.vii.2002 (Fig. 10).

SOFTLY, R. A.—A poster illustrating the recent histories of *Hecatera dysodea* (D. & S.) and *Polynixia flavicincta* (D. & S.) in the London area.

TREMEWAN, W. G.—A melanic aberration of *Idaea aversata* (L.), Playing Place, Truro, W. Cornwall, 29.vii.2002 (Fig. 11).

WEDD, D.—Moths taken or reared in 2001/02: *Coenocalpe lapidata* (Hb.); *Xestia alpicola alpina* (Humph. & Westw.); *Coenophila subrosea* (Steph.); and *Sabra harpagula* (Esp.). Moths from Henley-on-Thames, Oxon, including *Discoloxia blomeri* (Curt.); and, at a pheromone lure, *Bembecia ichneumoniformis* (D. & S.). From the Channel Islands: *Catocala electa* (View.), eight specimens seen between 21.viii and 11.ix.2002; *Scotopteryx peribolata* (Hb.), common amongst gorse; and *Trachea atriplicis* (L.).



Fig. 10. *Idaea aversata*, Densole, E. Kent, 2002, T. Rouse.



Fig. 11. *Idaea aversata*, Truro, W. Cornwall, 2002, W. G. Tremewan.

WEDD, D. and LONG, R.—Species recently discovered, or of uncertain identification from Jersey, Channel Islands, including *Pseudoterpua coronillaria* (Hb.).

WINTER, P. Q.—Examples of *Catocala fraxini* (L.) bred from a female captured at Muston, S.E. Yorks., 19.ix.2001.

WOOLDRIDGE, D. B.—Moths from Freshwater, Isle of Wight: *Mythimna litoralis* (Curt.), 16.vii.2002; and *Cyclophora pupillaria* (Hb.), 4.ix.2002.

YOUNG, D.—Moths with a wetland theme from Woolhampton, Berks.: *Callinorpha dominula* (L.); *Hydraecia petasitis* Double.; and *Diachrysia elysson* (Esp.). Aberrations of moths, including: *Agriopsis marginaria* (Fab.), Tunstall, E. Suffolk, 4.iii.2002; and *Atelutia centrigo* (Haw.), Saxmundham, E. Suffolk, 8.ix.2002.

YOUNG, M. R.—Aberrations of moths: *Xanthorhoe fluctuata* (L.), Malham Tarn, Mid-west York, 12.vi.2002; *Perizoma didymata* (L.), Ordiquhill, Banff, 20.viii.2002.; *Louaspilis marginata* (L.), Dingle, N. Kerry, 19.vii.2002; and *Xestia triangulum* (Hufn.), Oldmeldrum, N. Aberdeen, 2.viii.2002 (Fig. 12).



Fig. 12. *Xestia triangulum*, Old Meldrum, N. Aberdeenshire, M. R. Young.

#### BRITISH MICROLEPIDOPTERA

AGASSIZ, D. J. L.—*Borkhausenia münstella* (L.), Northfleet, Kent, 17.vi.2002. Considered extinct in Britain since 1966, it occurred commonly at nearby Greenhithe and Swanscombe in the 1880s and 1890s. *Vitula biviella* (Zell.), Northfleet, Kent, 16.vii.2002, new to VC16.

BEAUMONT, H. E.—*Caloptilia populetorum* (Zell.), Elveden Forest, West Suffolk (VC26), 13.vii.2002. No VC26 record is shown on map 104 in MBGBI vol. 2. *Argyresthia ivella* (Haw.), Stainton Little Wood, Doncaster, S.W. Yorks. (VC63), disturbed from hazel 10.vii.2002. Only the second recent Yorkshire record and the first from VC63 since 1915. *Isophrictis striatella* (D. & S.), West Melton, Rotherham, S.W. Yorks. (VC63), 30.vii.2002. The first Yorkshire record came from the Doncaster area in 2000, this represents the second county locality. *Scythris inspersella* (Hb.), Allerthorpe Common, Pocklington, S.E. Yorks. (VC61),



24.vii.2002. A single specimen, recently identified, was taken at the same locality in 2001. Several were seen in 2002, this moth has otherwise only been recorded in Britain from N. Norfolk. New to Yorkshire. *Olethreutes olivana* (Treits.), Ripon Parks, Ripon, mid W. Yorks. (VC64), 15.vi.2002. There is only one previous record from VC64 and the only other Yorkshire record was from VC62 in the mid nineteenth century. *Eucosma conterminana* (Guen.), West Melton, Rotherham, S.E. Yorks. (VC63), 1.vii.2002. The first VC63 and second Yorkshire record. *Epermenia falciformis* (Haw.), Misson Carr, Notts. (VC56), several to mv light 17.viii.2002. First Nottinghamshire record. *Donacaula mucronellus* (D. & S.), Strensall Common, N.E. Yorks. (VC62), 27.vii.2002. There is only a single previous county record, from the same locality in 1994. *Dioryctria sylvestrella* (Ratz.) Elveden Forest, West Suffolk (VC26), 14.viii.2002. Several moths recorded at mv light, evidently resident.

BLAND, K. P.—Species recently arrived in Edinburgh (VC83): *Caloptilia azaleella* (Brandts), Blackford, one at mv light 1/2.vi.2002 (also one in 2001). *Phyllonorycter leucographella* (Zell.), Marchmont, reared from mines on *Pyracantha coccinea* collected 12.ii.2002. Imagines emerged 29.iii.2002. *Cacoecimorpha pronubana* (Hübner), Mayfield, reared from pupae on *Primus lusitanica* collected 13.v.2002. Imagines emerged 16.v.2002. *Epiplatyas postvittana* (Walk.), Blackford, one at mv light 1/2.v.2002. Interesting incurvarioid moths taken in 2002: *Adela cuprella* (D. & S.), Drumcroy Hill, Perthshire, male at *Salix aurita* blossom 31.v.2002. This appears to be the first record from Mid-Perthshire (VC88). *Lanipronia pubicornis* (Haw.), Inver, Aberdeenshire (VC92) reared from pupa on *Rosa* sp. collected 30.v.2002. Imago emerged 4.vi.2002. Normally a coastal species, so surprising to find it in a Highland glen. This colony was first found in 2001 by Dr. J. R. Langmaid.

CLANCY, S.—*Bisigna procerella* (D. & S.), near Bethersden, Kent, two 22.vii.2002. Only known in Britain from two other Kentish localities. *Nascia ciliaris* (Hübner), Lydd, Kent, 2.vi.2001. Probably the third or fourth county record. *Duponchelia fovealis* Zell., New Romney, Kent, 20.ix.2002. *Loxostege sticticalis* (L.), Dungeness, Kent, 3.viii.2002. *Pinna boisduvaliella* (Guen.), Walmer, Kent, two of several specimens reared from sea-pea pods collected 10.vii.2002. Apparently double brooded at this locality, the first confirmed breeding of this moth in Kent. *Couobathra tumidana* (D. & S.), Littlestone, Kent, 15.viii.2002. *Dioryctria sylvestrella* (Ratz.), Greatstone, Kent, 16.vii.2002 and near Bethersden, Kent, 22.vii.2002, the latter probably indicating the presence of a resident population.

CLARKE, J.—*Palpita vitrealis* (Rossi), Lamorna Cove, Cornwall, 31.x.2002.

DOBSON, A. H.—*Aglossa pinguinalis* (L.), Farnham, Surrey (VC17), 27.vii.2002, flying in a hallway of a block of flats. The wingspan measures only 20 mm. compared with a usual wingspan of 30–44 mm. Barry Goater has two continental specimens of similar size so it may be a migrant. *Diasemiopsis rauburialis* (Dup.), Starcross, Devon (VC3) 3.vi.2002. *Dioryctria sylvestrella* (Ratz.), Tunstall Forest, Suffolk (VC25), 8.viii.2001 & 18.viii.2002.

ELLIOTT, B.—Hampshire: *Lanipronia fuscicollis* (Tengst.), Newton Common, two galls, one of which is atypical in that it does not occur in a fork but in the stem, rather similar to the gall of *Cydia servillana* (Dup.) on *Salix*. *Digitivalva perlepidella* (Staint.), North Hampshire, reared from *Imula conyza*. *Acrolepiopsis assectella* (Zell.), a locally common pest of leeks which appears to be spreading, having reached the outskirts of Southampton. *Trifurcula beiruei* Popl., Hayling Island, in an area where *Genista tinctoria* grows in quantity. The second British record since 1935. *Aucylis apicella* (D. & S.), Culverley, New Forest, reared from larvae on *Frangula alnus*. *Epinotia pygmaeana* (Hübner), Micheldever Forest. From other counties: *Digitivalva pulicariae* (Klim.), Arne, Dorset, reared from *Pulicaria dysenterica*. *Pancalia*

*schwarzella* (Fabr.), Balmedie, Aberdeen, specimens which appeared to be associated with *Viola tricolor*. *Epermenia insecurella* (Staint.), Royston, Hertfordshire, very locally common in 2002.

GIBBS, D.—*Ochsenheimeria vacculella* F. v. R., Flaxley Flushes, Gloucestershire 7.vii.2002; *Coleophora frischella* (L.), Batheaston Oxbow Nature Reserve, Somerset 18.vi.2002; *Elachista triseriatella* Staint., Avon Gorge, Bristol, Somerset 6.vii.2002; *Cochylis flaviciliata* (Westw.), Fahee, The Burren, 27.vii.2002; *Synaphe punctalis* (Fabr.), Binnegar Quarry, Dorset 22.vii.2002.

GREEN, D. G.—*Archineuapogon yildizae* Koçak, Tulloch Moor, Speyside, reared ex. bracket fungus *Fomes fomentarius* collected 15.v.2002. *Ancyliis tineana* (Hübner), Tulloch Bog, Speyside, 15.v.2002.

HALL, N. M.—*Argyresthia trifasciata* Staud., Earley, Reading, Berkshire (VC22) 16 & 18.v.2002, two typical examples and an aberration with an incomplete inner crossline and a line branching at right angles from the middle crossline. Other examples of *trifasciata* were found in another garden, about a mile distant, on 17.v.2002, so although new to Berkshire, it may already be widespread in Reading. *Psychoides verluella* Bruand, Fairlight Glen, Hastings Country Park, Sussex (VC14) 4.vi.2002, reared from *Asplenium scolopendrium*, new to East Sussex and from Streatley, Berkshire (VC22), 12.vi.2002, also reared from *Asplenium scolopendrium*. The foodplant is generally uncommon in Berkshire, however it is so abundant at Streatley that it was surprising to find only one case. New to Berkshire. *Psychoides filicivora* (Meyr.), Earley, Reading, Berkshire (VC22) 3.vi.1990 reared from *Asplenium*; 2.viii.1990 reared from *Dryopteris filix-mas*. New to Berkshire. The earliest attempts to find *verluella* in Berkshire produced *filicivora* instead. It can feed on *Asplenium* in the spring but then must switch to other ferns such as *Dryopteris filix-mas* in the autumn. *Dupouchelia fovealis* Zell., Earley, Reading, Berkshire, 14.viii.2002, new to VC22. *Tachystola acroxantha* Meyr., Birmingham (VC38) at window inside house 4.viii.2002, perhaps new to Warwickshire. *Pannuene ochsenheimeriana* (Lien. & Zell.), Reading, Berkshire 3.iv.2002.

HART, C.—*Hellisia carphodactyla* (Hübner), Longstone Heritage Centre, Isles of Scilly, Cornwall (VC1), 22.vii.2002 (leg. M. & W. Scott). The date of capture, falling between the two normal broods presumably represents a late spring brood specimen. New to Isles of Scilly and also to Cornwall; Ketton Quarry, Rutland (VC55), 14.ix.2002 (leg. A. Russell, M. Skevington & A. Mackay). Another specimen, from Groby Rifle Range, Leicestershire, 31.viii.2002 caught by A. Mackay was the first from VC55.

HAWKINS, R. D.—Surrey: *Yponomeuta cagnagella* (Hübner), Chertsey Meads, 7.vii.2002, seven moths on young spindle bush recently planted. *Ypsolopha mucronellus* (Scop.), Park Downs, Banstead, 11.x.2001, among dead grass; *Aublyptilia acanthodactyla* (Hübner), Colliers Wood, London, 19.vi.2002, flying indoors in heavily built up area with small gardens.

HECKFORD, R. J.—*Euteucha acetosae* (Staint.), near Bolt Tail, South Devon (VC3), leaf of *Rumex acetosa* with several mines 5.x.2002, locally common, new to VC3. *Ischnoscia borreouella* (Millière), Berry Head, Brixham, South Devon (VC3), 28.vii.2002 (with Dr M. R. Young). *Bucculatrix nigricornella* Zell., Invercauld, South Aberdeenshire (VC92) larvae grazing leaves of *Leucanthemum vulgare* 16.v.2002, moth reared 2.vi.2002, new to VC92. *Bryotropha politella* (Staint.), Devil's Elbow, East Perth (VC89) larvae among *Schistidium* sp. 15.v.2002, larva previously unknown. *Dichomeris juniperella* (L.), Rinabaich, South Aberdeenshire (VC92) full grown larvae in thick opaque tubes amongst *Juniperus communis* 11.v.2002, moth reared 3.vi.2002. Larva not previously recorded as overwintering in the British Isles.



*Anatrachytis badia* (Hodges), Marsh Mills, Plymouth, South Devon (VC3) larvae found in the calyces of pomegranates (*Punica granatum*) purchased 6 & 30.x and 3 & 13.xi.2001, moths reared 13 & 26.xi and 12.xii.2001. Four moths exhibited from seven specimens reared from two supermarkets in VC3 during 2001–2002. One of the pomegranates definitely, and the rest probably, originated from Spain. The species is a North American one not yet formally on the European list, but the exhibitor is aware of unpublished continental European records. The larva has not previously been recorded from pomegranate and possibly may not have been described. An adventive new to the British Isles. *Aethes piercei* Obr., Glen Lui, South Aberdeenshire (VC92) 3.vi.2001 (with Dr J. R. Langmaid), new to VC92. *Scoparia aubigualis* (Treits.), Hembury Woods, South Devon (VC3), larva amongst *Rhytidiadelphus loreus* (Hedw.) Warnst. 29.iii.2002, moth reared 24.iv.2002; Trowlesworthy Warren, South Devon (VC3) larvae amongst *Polytrichum commune* Hedw. 5.v.2002, moth reared 15.vi.2002. *Phycitodes maritima* (Tengst.), Bruar, East Perth (VC89) several larvae amongst flower heads of *Senecio jacobaea* 1.ix.2001, moth emerged 23.vi.2002 (confirmed by dissection), new to VC89.

HECKFORD, R. J. & STERLING, P. H.—*Bryotropha galbanella* (Zell.), Old Bridge of Dee, Invercauld, South Aberdeenshire (VC92), reared from larva in the moss *Dicranum scoparium* collected by R. J. Heckford on 3.ix.2001, reared by P. H. Sterling, emerged 21.v.2002. Genitalia checked by R. J. Heckford.

HENWOOD, B. P.—*Phyllonorycter strigulatella* (Lien. & Zell.), Parke, Bovey Tracey, South Devon (VC3), reared ex. larvae on *Ahus iucana* collected x.2002. *Tebenna unicalis* (Mann), Abbotskerswell, South Devon (VC3), at mv light 16.ix.2002. *Galleria mellonella* (L.), Abbotskerswell, South Devon (VC3), 7.viii.2002. *Euteucha acetosae* (Staint.), Hartland Point, North Devon (VC4), reared ex. larva on *Rumex acetosella* collected 31.viii.2002. *Celypha auropasaciana* (Haw.), Hembury Woods, South Devon (VC3), 21.vi.2002. *Olethreutes arcuella* (Cl.), Hembury Woods, South Devon (VC3), 24.v.2002 resting on bramble leaf in the evening. *Schiffermullerina gaudis* (Desv.), Hembury Woods, South Devon (VC3), 24.v.2002 beaten from *Quercus petraea*.

HONEY, M. R.—*Cameraria olivella* Desch. & Dimic, Wimbledon Common (VC17) vii.2002 (Fig. 13), reared ex. mines in leaves of *Aesculus hippocastanum* together with larval mines and a map showing the currently known distribution in the south-west London area. New to Britain. *Triaxomasia caprimulgella* (Staint.), Buckingham Palace grounds, London, 27.vi.2002.

KNILL-JONES, S. A.—Microlepidoptera from the Isle of Wight (VC10) including, from Freshwater: *Cydia funebrana* (Treits.), 5.vii.2002. *Oxyptilus laetus* (Zell.), 15.vi.2002, new to VC10 and the 13th British specimen. *Argyresthia goedartella* (L.), 7.viii.2002, and from Cranmore, two on 26.vii.2002, only one previous record from the island. *Ovendenia lienigianus* (Zell.), 17.vii.2002 and recorded commonly at mv light vi–ix.2002, one at Cranmore 29.viii.2002. Cranmore: *Recurvaria leucatel-la* (Cl.), 26.vii.2002, new to VC10. *Oidae-matophorus lithodactyla* (Treits.), 26.vii.2002. The following represent the first recent records from the Isle of Wight: Freshwater: *Ypsolopha sequella* (Cl.), 6.x.2002 (leg. T. Rogers); *Bryotropha terrella*



Fig. 13. *Cameraria olivella* ×4, Wimbledon Common, Surrey, 2002, M. R. Honey.



(D. & S.), 9.vi.2002; *Clavigesta purdeyi* (Durr.), 6.viii.2002; *Cydia jautliuana* (Dup.), 22.vii.2002.

LANGMAID, J. R.—*Trifurcula beiruei* Pupl., Hayling Island, Hampshire, flying over *Genista tinctoria* 2.ix.2002.

MANNING, D. V.—Buckinghamshire (VC24) 2002 (leg. Peter Hall). *Autispila treitschkiella* (F.v R.). *Opostega salaciella* (Treits.), new to VC24. *Argyresthia brockeella* (Hübner). *Mouphla bradleyi* Reidl.

MCCORMICK, R. F.—Interesting moths from Devon in 2002 (the specimens exhibited were not necessarily the ones on which the records were based): *Cochylis molliculana* Zell., Berry Head, Brixham, one of two at mv light 16.viii.2002. *Pediasia contamineella* (Hübner), 6.viii.2002. *Platytes alpinella* (Hübner), Dawlish Warren, in good numbers at mv light 6.viii.2002. *Eudonea pallida* (Curt.), Dawlish Warren, at mv light 6.viii.2002. *Diasemiopsis rauburalis* (Dup.), Crownhill, Plymouth, 20.v.2002 (leg. J. Beswetherick). *Gynmancyla cauella* (D. & S.), Dawlish Warren, larvae abundant on *Salsola kali* 26.viii.2002. Holland Wood, New Forest, Hampshire on 15.vii.2002: *Morophaga choragella* (D. & S.); *Calanotropha paludella* (Hübner), three at mv light; *Elophila nyuphaeata* (L.), a specimen with brown forewings.

NASH, S.—Fernham, nr. Faringdon (VC22): *Caloptilia azaeella* (Brandts), 29, 30(2).vii & 7.viii.2002, new to west VC62. *Yponomeuta rorella* (Hübner), 31.vii & 6.viii.2002. *Acleris rufana* (D. & S.), 26.vii.2002, the first VC22 record in over 100 years. *Ostrinia nubilalis* (Hübner), 8, 15 & 22.vii.2002. *Diasemiopsis rauburalis* (Dup.), 6.vi.2002, the second VC22 record. *Palpita vitrealis* (Rossi), 31.x.2002. *Argyresthia trifasciata* Staud., Highworth, nr. Swindon, Wiltshire, five beaten from cultivated juniper 23.v.2002, new to VC7. *Evergestis extimalis* (Scop.), Church Norton, Pagham Harbour, West Sussex, 17.viii.2002. Pednavounder, Coverack, Cornwall: *Diasemiopsis rauburalis* (Dup.), 1.x.2002. *Palpita vitrealis* (Rossi), 10.x.2002. Durlston Country Park, Swanage, Dorset: *Palpita vitrealis* (Rossi), 31.x.2002. *Conobathra tinuidana* (D. & S.), 3.ix.2002.

PARSONS, M. S.—Dorset (VC9): *Phyllonorycter strigulatella* (L. & Zell.), Lower Walditch, from mines collected 19.xi.2001. *Pseudateuاليا flavifrontella* (D. & S.), Walditch, 20.v.2002 & 1.vi.2002. *Crambus silvella* (Hübner), Shaggs, 19.viii.2002; *Evergestis linbata* (L.), Shaggs, 12.viii.2002. *Euzophora bigella* (Zell.), Bridport, larva 29.ix.2001, imago emerged 1.xii.2001 ex. pomegranate. West Sussex (VC14): *Dioryctria sylvestrella* (Ratz.), Rewell Wood, 4.vii.2002. Surrey (VC17). *Cauteraria ohridella* Desch. & Dimic, Wimbledon, reared from mines on *Aesculus hippocastanum* collected 15.vii.2002. Moray (VC95): *Caryocolum junctella* (Dougl.), Abernethy, 3.iv.2002. *Rhyacionia logaea* Durr., Abernethy, 3.iv.2002. Easternness (VC96): *Archineuapogon yildizae* Koçak, Invertromie, reared from larvae collected 6.iv.2002. *Acleris utaccana* (Treits.), Abernethy, 3.iv.2002. *Acleris logiana* (Cl.), Lynachlaggan, 3.iv.2002.

PATTON, S. J.—*Paysandisia archon* (Burmeister) (Cestniidae), Bosham, Chichester, West Sussex flying in the mid afternoon of 13.viii.2002 (leg. B. & D. Stear) (Fig. 14). Originating in South America this species now appears to be established in southern Europe where its larvae are a pest of various palms. First occurrence in the British Isles, whether it is an accidental importation or immigrant is uncertain.

PORTER, J.—A selection of forms of *Acleris cristana* (D. & S.), all from two adjacent Surrey localities between August and October 2002. The sample consisted of approximately 160 moths tapped on warm days from vegetation that was either close to, or of the preferred foodplant, *Prunus spinosa*. The most frequent form was

*cristauana* Don. closely followed by *semiustulana* Curt. Good numbers of *cristana* D. & S., *striana* Haw. and *desfontainiana* Fabr. were recorded but many forms stated to be frequent were not seen at all. *Cameraria ohridella* Desch. & Dimic, Wimbledon, Surrey, 14.viii.2002; *Monochroa elongella* Hein., Tilshead, Wiltshire, 17.vii.2002. *Acleris permutana* (Dup.), Dungeness, Kent, 15.vi.2002, reared ex larvae on *Rosa pinpiuellifolia*. *Aucylis upupana* (Treits.), Mickleham, Surrey, 29.v.2002. *Eurrhynx hortulata* (L.), Chessington, Surrey, 5.vi.2002, an aberration.

ROUSE, T.—Specimens of *Dioryctria sylvestrella* (Ratz.); the earliest British specimen currently known from Reinden Wood, Kent, 17.viii.1995. The second British record from Samphire Hoe, Kent, 3.viii.1997. Two specimens showing difference in size taken during the BENHS field meeting to Tunstall Forest, West Suffolk 10.viii.2002.

SIMS, I. & LOPEZ-VAAMONDE, C.—An exhibit showing some preliminary results from a DNA analysis of members of the family Psychidae compiled using the 28S ribosomal DNA gene. The results show that *Luffia ferchaultella* (Stephens, 1850) is genetically identical with *L. lapidella* (Goeze, 1783). The two should therefore be synonymised, the name *lapidella* having priority. *Luffia ferchaultella* is a parthenogenetic form of the sexually reproducing *L. lapidella*. The sub-family Taleporiinae appears to be the most ancestral of those studied. Data from other taxa are required to investigate this further.

STERLING, P. H.—*Alabonia geoffrella* (L.), Puddletown, Dorset (VC9), reared from larva in dead stem of *Rubus fruticosus* agg. collected 21.ii.2002, emerged 9.iv.2002. *Bryotropha umbrinella* (Zell.), Stokeford Heaths, Dorset (VC9), reared from larva in the moss *Ceratodon purpureus* collected 17.ii.2001, emerged v.2001. *Dichomeris alacella* (Zell.), Ashurst Wood, New Forest, Hampshire (VC11), at rest on tree trunk 23.vii.2002. *Cosmopterix pulchritella* Chambers, Petit Bôt, Guernsey, reared from larvae in mines on *Parietaria judaica* collected (with Peter Costen & Rich Austin) on 6.x.2002, emerged 13 & 14.x.2002. *Archips oporana* (L.), Morden, Dorset (VC9), bred ex. ova from female at mv light on 6.vii.2000 by Peter Davey, larvae reared on *Abies grandis*, emerged v.2001. *Acleris lorquiniana* (Dup.), Radipole Lake Nature Reserve, Weymouth, Dorset (VC9), reared from larvae in flowers of *Lythrum salicaria* collected 20.ix.2002, emerged 15.x.2002. *Phaulernis dentella* (Zell.), Fontmell Down, Dorset (VC9), reared from larvae in seeds of *Chaerophyllum temulum* collected 20.vii.2001, emerged 22.v.2002.

WEDD, D.—*Phyllonorycter leucographella* (Zell.), *Alabonia geoffrella* (L.) and *Pseudosciaphila branderiana* (L.), moths recorded for the first time at Henley-on-Thames, Oxfordshire during 2001 or 2002. *Epischmia banksiella* (Hübner), Guernsey, C.I., 5.ix.2002 (perhaps indicating a second brood).

YOUNG, D.—*Dioryctria sylvestrella* (Ratz.), Tunstall Forest, East Suffolk Over thirty moths recorded during a BENHS field meeting 10/11.viii.2002 following the recording of a few specimens in 2001.



Fig. 14. *Paysandisia archon*  $\times 0.5$ , Bosham, Chichester, W. Sussex, 2002 leg. B. & D. Stear, S. J. Patton.



YOUNG, M.—*Dichomeris alacella* (Zell.), Doward, Herefordshire 25.vii.2002 (with Dr M. Harper). *Eudonia alpina* (Curt.), Glen More, Strathspey, 19.v.2002 (with N. Littlewood), a low altitude locality.

#### FOREIGN LEPIDOPTERA

CORLEY, M. F. V.—22 of the 25 species of Pyralinae recorded from Portugal were exhibited. One *Hypotia* species is undescribed but is now known from several West Mediterranean countries as well as Portugal. Apart from *Actenia* species and *Endotricha flammealis* D. & S. most show little variation, although some are sexually dimorphic. The life histories of many are little known. Those that are known usually have larvae living on dry or dead plant material, which may be still attached to the plant. *Hypotia corticalis* D. & S. is known from seedheads of *Daucus* and from spinings among dead leaves on the lower parts of *Santolina*. *Aglossa* species feed on dry dung and vegetable detritus. *Synaphe punctalis* Fabr. feeds on moss.

Newly described, undescribed and misunderstood Depressariidae from the Iberian Peninsula: (i) an undescribed species of *Depressaria* related to *D. disciplinuetella* H.-S. and *D. veneficella* Zell., found in Albarracín and the Sierra Nevada. (ii) a species of *Depressaria* known from the Algarve and Malaga, which is probably undescribed. Only females are known at present. (iii) *Agonopterix rigidella* Chrét., described from material reared from *Bupleurum rigidum* in the South of France. Recent works have treated it as a junior synonym of *A. fruticosella* Wals., which feeds on the shrubby *Bupleurum fruticosum*. The specimens displayed as *A. ?rigidella* were reared from *Bupleurum rigidum* in the Algarve. They differ from *A. fruticosella* Wals. in size, forewing appearance, female genitalia and in the larvae. The male genitalia of *A. fruticosella* have still to be examined and have not yet been figured in any published work. (iv) *Agonopterix mendesi* Corley and *Depressaria cinderella* Corley, described recently based on Portuguese specimens, reared respectively from *Centaurea spherocephala* on the west coast of Algarve and from *Conopodium capillifolium* in the Serra de São Mamede in east central Portugal.

HALL, N. M.—Moths from Spain: (i) *Ochropleura flammatra* D. & S., males and females, Puerto de los Blancos, Granada, 11.ix.2002. Fibiger (*Noctuidae Europaeae* I) did not discuss sexual differences. Bretherton in MOGBI states 'thorax with prominent collar, in male black, in female suffused grey'—which appears to be wrong as both sexes have black collars. At first sight both sexes appear to have fine antennae, but through a lens one can see that the male's antennae are slightly pectinated and the female's are not. NMH has been unable to obtain fertile eggs from *flammatra* females despite trying for three consecutive years. (ii) *Agrotis sabulosa* Ramb. and *Cerocala scapulosa* Hb., Matalascañas, Huelva, 4.ix.2002. These are two well known local species that occur in Huelva Province. Emergence date ranges of Spanish Lepidoptera are sometimes not well known because there are relatively few Spanish field entomologists—and non-Spaniards working in Spain are often looking for particular species at times when they are already known to occur. Fibiger (*Noctuidae Europaeae* I) says that *sabulosa* comes to light in June & July, but this is presumably an error since his illustrations are of specimens caught on 21.ix.1981 and 2.x.1981. Calle (*Noctuidos Españoles*) says that there is one autumnal generation in October. NMH believes that his specimens taken on 4.ix.2002 were about a month earlier than expected. Similarly, Calle states that *scapulosa* occurs in the spring, but it appears to be just as common in the autumn. (iii) *?Agrotis syricola* Berio, Cala Medio Luna, Parque Natural Cabo de Gata, Almería 8.x.2000. When



collected they looked as though they were a different species from *Agrotis puta* Hb., which was also present. They *could* be *Agrotis syricola* Berio, which is known from Italy, and can be distinguished from *puta* by the shining white hindwings and reputedly by the markings on the head. (iv) *Anthraccia ephialtes* Hb., Barranco de las Aguilas, Parque Natural Cabo de Gata, Almeria, 7.ix.2002, a closely related species to *Amphipyra pyramidea* Linn. (v) *Enxoa abdallah* Ob., Puerto de los Blancares, Granada, 5.ix.2002. (vi) *Cryphia simulatricula* Guen., Puerto de los Blancares, Granada, 11.ix.2002. (vii) *Agrotis ripae* Hb., Punta Umbría, Huelva, 1.ix.2002. (viii) *Agrotis crassa* Hb., 2 females, Puerto de los Blancares, Granada, 5.ix.2002, with 'spectacular' abdomens. The 'stripy' abdomens of *crassa* are one of their most distinctive field characters—but the very sharply defined black and white stripes on these particular specimens were extraordinary. The moths were almost certainly *crassa*, but *crassa* is largely replaced by *Agrotis lata* Treits. as one moves south through Spain—and the females are not so easy to distinguish as the males. (ix) *Antophila cataphanes* Hb., *Antophila dilucida* Hb. & ?*Rhemnaptera gudarica* Dufay, Cave at Embalse de la Peña, Zaragoza, 16.ix.2002. These moths were found in an unfinished abandoned tunnel, cut for about 30m into a rock face. Some moths habitually enter tunnels and caves for aestivation or hibernation. NMH usually finds at least ten (total) of the two noctuids *cataphanes* and *dilucida* in this particular tunnel, which he has visited in most months from May to October, but *Rhemnaptera* species are found there less often. (x) *Microloxia herbaria* Hb., 1 male, 1 female, Cala Bordonares, Almeria, 8.ix.2002. Hausmann (*Geometrid Moths of Europe 1*) describes only one *Microloxia* species for Europe, but in Spain NMH finds two very different forms, which *look* like different species. This year, both forms were found at the same locality on the same night, but unfortunately they were of different sexes so the genitalia could not be directly compared. (xi) *Crocallis dardoinaria* Donzel, Puerto de los Blancares, Granada, 5.ix.2002. These included some colour forms NMH had not previously encountered. Some females were retained for breeding. (xii) *Coscinia cribraria* Linn., Puerto de los Blancares, Granada, 5.ix.2002 and *Coscinia benderi* Marten, Punta Umbría, Huelva, 31.viii–3.ix.2002 (Fig. 15). Are they the same species? Gomez Bustillo (*Mariposas de la Peninsula Iberica, Vol IV*, 1979) treated *benderi* as a separate species and said (1) that it occurs only in Huelva province, (2) that the larvae have yellow legs unlike *cribraria* where the legs are black and (3) the larvae feed exclusively on a single *Cistus* species. de Freina & Witt (*die Bombyces und Sphinges der Westpalaearktis*, 1987) treated it as a form of *cribraria*, and Karsholt & Razowski (*The Lepidoptera of Europe*, 1996) listed it as a separate species.



Fig. 15. *Coscinia benderi*  $\times 1.25$ , Punta Umbría, Huelva, Spain, 2002. N. M. Hall

Gomez Bustillo, 1979 says "Recently, the specialist H. de Toulguet, after studying a series of *benderi* of both sexes, and examples of the sympatric *Coscinia cribraria chrysocephala* Hb., came to the conclusion—as much from the external morphology as from the genitalia of both taxa—that *benderi* can be treated only as a recessive mutation of *C. c. chrysocephala*, occurring at low density, appearing from year to year in irregular proportion". In Huelva province NMH saw four *benderi* over four nights and no *cribraria*, which is not what he would expect if two uncommon

recessive genes were needed to produce *beuderi*. However, *beuderi* is clearly either a true species or is in the process of becoming one and the latter possibility is perhaps the more interesting. If a recessive gene is really involved, perhaps the corresponding dominant gene is 'dying out' locally because the recessive gene produces 'fitter' individuals in this special environment. e.g. it might allow the larvae to feed on *Cistus* efficiently.

Many examples are known where the possession of a *single* recessive gene can confer a local advantage (e.g. the sickle cell gene in man in the presence of malaria), but they are usually well known because the double recessive is lethal. When the double recessive is also locally advantageous, two species could evolve from one without the need for geographical isolation.

Specimens bred from gravid females caught in Spain and the Canary Islands: (i) *Idaea lutulentaria* Stdgr, Puerto de la Mora, Granada. Female collected 13.vii.2001. F<sub>1</sub>: 1 on 4. i.–28.iii.2002. (ii) *Idaea carvalhoi* Herb., Puerto de la Mora, Granada. Female collected 12.vii.2001. F<sub>1</sub>: 1 on 24.vi.2002. (iii) *Idaea saleri* Dom. & Baix., L'Hospitalet del Infant, Tarragona. Female collected 31.vi.2001. F<sub>1</sub>: 2.x.–26.xi.2001. (iv) *Idaea lusohispánica* Herb. Puerto de la Mora, Granada. Female collected 12.vii.2001. F<sub>1</sub>: 15.xi.2001–23.ii.2002. (v) *Idaea laevigata* Scop., Oliva Beach Apartments, Fuerteventura. Female collected iv.2002. F<sub>1</sub>: 8.vii.–31.vii.2002. (vi) *Idaea deversaria* H.-S., Puerto de la Mora, Granada. Female collected 12.vii.2001. F<sub>1</sub>: 11.v.–1.vii.2002. (vii) ?*Idaea longaria* H.-S. (could be *Idaea abuorma* Pinker), Oliva Beach Apts, Fuerteventura. Female collected iv.2002. F<sub>1</sub>: 1.vii.–13.vii.2002. (viii) *Idaea obsoletaria* Ramb., L'Hospitalet del Infant, Tarragona. Female collected 30.vi.2001. F<sub>1</sub>: 29.v.–1.vii.2002. (ix) *Idaea infirmaria* Ramb., L'Hospitalet del Infant, Tarragona. Female collected 1.vii.2001. F<sub>1</sub>: 2 on 18.x.2001. Female collected 30.vi.2001. F<sub>1</sub>: 14.vi.–10.viii.2002. (x) *Scopula gnaucharia* Alphéraky, Oliva Beach Apts, Fuerteventura. Female collected 27.xi.2001. F<sub>1</sub>: 2 on 9 iv.2002.

*Paedesua robusta* Walk., Oliva Beach Apts, Fuerteventura. Bred. Larva collected iv.2002, emerged 22.v.2002

MARTIN, G.—Some Sphingidae from Las Cuevas Research Station, Chiquibul National Park, Belize. 62 species of Sphingidae were recorded between 25.vi and 8.viii.2002, including three species new to Belize. An 'Umbrella trap' was used instead of the usual sheet and bulb, producing spectacular results. The 'Umbrella trap' consisted of a 2 metre pole hammered firmly into the ground with an open golfing size umbrella on top, attached with brown packing tape. A large net curtain, stapled together to form a tube, was placed over the umbrella with the top of the tube being stapled to the edge of the umbrella. Two mv bulbs were suspended by their wires from the umbrella vanes, making sure that the bulbs were firmly secured and not touching any part of the net curtain or umbrella. The bottom of the net curtain tube was kept taut by placing rocks on it. The tube is effectively sealed and any Lepidoptera attracted remain on the outside of the net curtain. There are several advantages to this method: (i) light bulbs are safe from rain damage; (ii) recorders can walk round the trap rather than having to go behind a sheet and recover specimens; (iii) specimens tend to either stay put on the net curtain or circle it making collection of specimens easy; (iv) the circular design provides 360° illumination of the surrounding forest.

The following species were collected (nomenclature following Kitching & Cadiou (2000), *Hawkmoths of the world: an annotated and illustrated revisionary checklist*):

Species new to Belize: *Manduca barnesi* Clark, *Stolidoptera tachasara* Druce, *Hyles lineata* Fabr. Others: *Protaubulys eurycles* H.-S., *P. strigilis* Linn., *Adhemarius*



*gaunascus* Stoll, *A. ypsilon* Roths. & Jord., *Manduca albiplaga* Walk., *M. dilucida* Edwards, *M. florestan* Cramer, *M. liannibal* Cramer, *M. lanuginosa* Edw., *M. lefeburei* Guérin-Ménéville, *M. muscosa* Roths. & Jord., *M. occulta* Roths. & Jord., *M. rustica* Fabr., *M. schansi* Clark, *Neococytius cluentius* Cramer, *Cocytius duponchel* Poey, *C. lucifer* Roths. & Jord., *Cantethia spuria* Boisd., *Pachygonidia ficus* Linn., *P. syces* Hb., *Enyo gorgon* Cramer, *E. ocypte* Linn., *Aleuron chloropterum* Perty, *Callionima falcifera* Gehlen, *C. nominus* Walk., *C. parce* Fabr., *Madoryx bubastus* Cramer, *M. oichus* Cramer, *M. phthonius* Fabr., *Pachylioides resunus* Walk., *Henieroplanes triptolennus* Cramer, *Nyceryx riscus* Schaus, *Perigonia ilus* Boisd., *P. lusca* Fabr., *Pseudosphinx tetrio* Linn., *Isognathus riuosa* Grote, *Erinnyis craneri* Schaus, *E. ello* Linn., *E. obscura* Fabr., *E. oenotrus* Cramer, *E. yucatan* Druce, *Eumorphia anchemolus* Cramer, *E. labruscae* Linn., *E. satellitia* Linn., *E. triangulum* Roths. & Jord., *E. vitis* Linn., *Xylophanes anubus* Cramer, *X. belti* Druce, *X. ceratonioides* Grote & Robinson, *X. chiron* Drury, *X. cyrene* Druce, *X. libya* Druce, *X. neoptolennus* Cramer, *X. pluto* Fabr., *X. porcus* Hb., *X. thyelia* Linn., *X. titana* Druce, *X. turbata* Edw., *X. tyndarus* Boisd.

MASTERS, I. D.—Moths from the Dominican Republic, 3–13.viii.2002.

The Dominican Republic shares the island of Hispaniola in the Greater Antilles with the Republic of Haiti. All specimens are from the southeastern coastal location of El Cortecito, a district of Bavaro, Punta Cana in La Altagracia Province. The following species, all taken at light, had been identified: Sphingidae: *Manduca sexta jamaicensis* Butl., 11.viii.2002; *Eumorphia vitis* Linn., 13.viii.2002; *Pachylioides resunus* Walk., 11.viii.2002; *Erinnyis ello* Linn. (male and female), 11.viii.2002; *Xylophanes pluto* Fabr., 12.viii.2002; *Perigonia lusca* Fabr., 12.viii.2002; *Perigonia uanui* Clark, 12.viii.2002. Noctuidae: *Ascalapha odorata* Linn. (male and female), 11.viii.2002. Pyralidae: *Palpita vitrealis* Rossi, 12.viii.2002.

PICKLES, A. J.—Some Lepidoptera from Iceland.

From 20–28.vii.2002 AJP was privileged to take part in a trek in Iceland on behalf of Macmillan Cancer Research. The party trekked from Mount Hekla south to the Thórsmörk Valley and Gigjökull Glacier via Landmannahellir, Landmannalaugar and the Markarfljót Canyon. Because of the nature of the trek, AJP was only able to take a few boxes and tubes and had no opportunity to deviate from the route, and the weather was bad for much of the time. As a result very few Lepidoptera were encountered. Five species were displayed: (i) *Eana osseana* Scop. was seen at Mount Hekla, at the hot springs at Landmannalaugar, and flying in rain at Thórsmörk. (ii) *Pyla fusca* Haw. This species was abundant in several barren areas where it rested on the black volcanic ground in much the same way as it rests on burned ground in, for example, the New Forest. (iii) *Stenoptilia islandicus* Stdgr. recorded from the lower slopes of Mount Hekla in an area of barren volcanic lava overlaid with dust from the recent eruption in 2000. There were very few colonising plants and AJP was not able to determine which saxifrage it was associated with. The species is reportedly common around hot springs but none was found at the hot pools at Landmannalaugar. (iv) *Xanthorhoe decoloraria* Esp. = *numitata* Hb. ssp. *arcticaria* Keferstein. About thirty specimens were encountered along a river bank at Landmannahellir—all at rest or making sporadic short flights around 23.00 h. A wide range of variation was exhibited, which seemed marginally different from that encountered in Scotland. Wolff (1971) does not believe the population justifies subspecific status. Scottish and Lakeland specimens of the nominate subspecies were shown for comparison. (v) *Apamea zeta* Treits. ssp. *exulis* Lefeb. This was the only noctuid caught and was flying to isolated *Silene* plants in a rocky defile of the Hrafninnusker Valley at 13.00 h.



There was no darkness at this time of year and only four other noctuids were seen, all flying very high in the period around midnight. Wine ropes were improvised on one occasion but nothing was attracted.

PLANT, C. W.—(1) Some macromoths recorded at light from mountains in south-west Bulgaria, 22–27.v.2002 by Colin Plant, Duncan Fraser and Lance Gorman. A detailed account of the trip is being prepared for publication in the *Entomologist's Record & Journal of Variation*. The following species were recorded (nomenclature follows the 1996 *European Checklist* by Karsholt & Razowski): Sesiidae: *Chamaesphesia hungarica* Tomala. Cossidae: *Parahypopta caestrum* Hb., *Dyspessa salicicola* Eversm., *Dyspessa ulula* Borkh. Pyralidae: *Synaphe moldavica* Esp., *Synaphe antennalis* Fabr., *Pempelia palumbella* D. & S., *Ancylosis cinnanomella* Dup., *Xanthocrambus saxonellus* Zinck., *Chrysocrambus craterella* Scop., *Thisanotia chrysoneuchella* Scop., *Evergestis frumentalis* Linn. ssp. *asiaticalis* Rag., *Evergestis aenealis* D. & S., *Loxostege virescalis* Guen., *Loxostege delibaticata* Szent-Ivány & Uhrik-Meszáros = *huebneri* Koçak, *Ecpyrrorrhoe rubiginalis* Hb., *Pyrausta sanguinalis* Linn., *Pyrausta castalis* Treit. Lasiocampidae: *Odonestis pruni* Linn. Sphingidae: *Marumba quercus* D. & S., *Rhetera komarovi* Christ. ssp. *drilon* Rebel & Zerny (Fig. 16), 6858 *Hyles vespertilio* Esp., Geometridae: *Stegania trinaculata* Vill., *Stegania dilectaria* Hb., *Helionata glarearia* D. & S., *Tephрина murinaria* D. & S., *Neognopharnia stevenaria* Boisd., *Eilicrinia cordiaria* Hb., *Nychiodes dalmanina* Wagner, *Synopsis sociaria* D. & S., *Peribatodes unbraria* Hb., *Epirranthis diversata* D. & S., *Autonechloris snaragdaria* Fabr., *Chlorissa etruscaria* Zell., *Microloxia herbaria* Hb., *Idaea ostrinaria* Hb., *Horisme corticata* Treits., Notodontidae: *Rheumatophila alpina* Bellier ssp. *osmana* Friedel, *Harpyia milhauseri* Fabr., *Spatalia argentiua* D. & S. Noctuidae: *Acronicta orientalis* Mann, *Idia calvaria* D. & S., *Minucia lunaris* Bartel, *Dysgonia algira* Linn., *Prodotis stolidia* Fabr., *Drasteria cailino* Lefèb., *Lygephila cracca* D. & S., *Catephia alchymista* D. & S., *Aedia leucomelas* Linn., *Gonospileia triquetra* D. & S., *Zethes insularis* Ramb., *Schinia sentosa* D. & S., *Apanstis rupicola* D. & S., *Pseudoxestia apfelbecki* Rebel, *Actinotia radiosa* Esp., *Dicycla oo* Linn., *Cosmia confinis* H.-S., *Lithophane merckii* Ramb., *Hecatera cappa* Hb., *Hadena magnolii* Boisd., *Sideridis*



Fig. 16. *Rhetera komarovi* ssp. *drilon*. Struma Valley, Bulgaria, 2002, C. W. Plant

*lanpra* Schaw., *Mythimna andereggii* Boisd., ssp. *pseudoconima* Rebel, *Pachetra sagittigera* Hufn. Lymantriidae: *Parocneria terebinthi* Freyer. Nolidae: *Meganola gigantula* Stdgr, *Earias vernana* Fabr. Arctiidae: *Setina roscida* D. & S., *Amata phegea* Linn., *Amata kruegeri* Ragusa (Fig. 17), *Watsonarctia casta* Esp. = *deserta* Bartel.



Fig. 17. *Amata kruegeri*. Kozhnh, Bulgaria, 2002. C. W. Plant

(2) The three European 'Lesser Broad-bordered Yellow Underwings'.

(i) The British 'Lesser Broad-bordered Yellow Underwing' is correctly known as *Noctua janthe* (Borkhausen) and occurs widely and commonly in western and central Europe including southern Scandinavia, but is absent from the former Soviet states in the east and from the Balkan Peninsula. (ii) Langmaid's Yellow Underwing, *Noctua janthina* (D. & S.) has occurred only once in Britain, in Hampshire, and is generally restricted to southern and eastern Europe, occurring only in Spain, southern France and Italy in the west. It replaces *janthe* in the Balkans. (iii) *Noctua tertia* von Mentzer, Moberg & Fibiger was not recognised as a separate species until 1991. It is an overlooked species of Mediterranean-Asiatic origin, known from Greece, Macedonia and Bulgaria in Europe and only from Turkey and Iran outside.

CWP exhibited a series of *N. janthe* alongside a series of *N. janthina*, all from the Department of Tarn in south-west France viii.2002, and a single female *N. tertia* from the Macedonian border area of Bulgaria v.2002.

*N. tertia* was strikingly larger than the other two species and the French *N. janthina* were distinctly smaller than both the other species, though this was an autumn generation and the example of *tertia* was collected in the spring. The examples of *N. janthina* were far less striking than the Hampshire specimen, the origin of which is unknown, and it was for this reason that these examples had been exhibited.

Separation of set specimens: in *janthina* the black band on the upper surface of the hindwing reaches the edge of the wing at the apex, whereas in both *janthe* and *tertia* the border of the hindwing on the upper surface is entirely yellow. In specimens with wings set well forwards, the hindwing costa (upperside) is always black in *janthina* and *tertia*, but is always at least partially yellow in *janthe*; this is a character that simply cannot be seen if the forewings overlap the hindwings and should be noted during setting. The black area of the underside of the forewing contrasts strongly with the paler areas in *janthe* and *tertia*, but in *janthina* the pale area is less clearly separated or totally obscured. In both *tertia* and *janthina*, the black extends beyond the sub-terminal line and is diffuse on the outer edge; in *janthe* the black ends abruptly at the sub-terminal line usually as a series of small 'fingers'.

Recognition of *janthina* should not present any problem; separation of *tertia* and *janthe* in areas where they may overlap in range is likely to be more of a problem. The genitalia have few distinguishing features of use.

Field recognition: in flight around a moth trap *N. janthina* is distinguishable from *N. janthe* extremely easily since the hindwings appear as black with a yellow spot whilst those of *janthe* appear bright yellow with a black border. Once seen, this difference is very obvious. At a vertical sheet in the south-west of France during August 2002, *N. janthina* settled fairly rapidly and was reluctant to fly again, whereas

*N. jantho* fluttered and bashed about for ages before settling and readily took off again if the sheet was accidentally knocked. No field observations were made on the single example of *N. tertia*.

(3) The European 'Spectacle' Moths: *Abrostola* spp.: there are four species of the noctuid genus *Abrostola* in Europe, though only two are currently known from Britain. As species extend their ranges as a consequence of planetary climate change the possibility of other European species occurring in Britain should not be overlooked. The four European species were presented for comparison, together with illustrations of the male genitalia. The characters of the clavus and associated region of the valvae can be seen very easily with a hand lens if specimens have the genitalia splayed during setting. The characters of the aedeagus are very distinct and should be used for problem specimens. To avoid confusion between the two current British species, whose names have been interchanged several times, the English name was also given: (i) *Abrostola tripartita* (Hufn.), the Spectacle or Light Spectacle, occurs commonly across all of Europe. (ii) *A. triplasia* (Linn.), the Dark Spectacle, occurs commonly across all of Europe. (iii) *A. agriorista* Dufay is principally found in eastern Europe and the Balkan Peninsula (Italy, Czech Republic, Slovakia, Hungary, former Yugoslavia, Rumania, Bulgaria, Macedonia and Greece), but is also recorded from France. (iv) *A. asclepiadis* (D. & S.) occurs commonly across all of Europe, including France, Belgium and Germany as well as Denmark, Norway, Sweden and Finland, but not yet in Britain, Ireland, Holland or Luxembourg. Surely a candidate for arrival in Britain in due course?

#### DIPTERA

ALBERTINI, M. V.—*Ctenophora ornata* Meig. (Tipulidae) (Fig. 18) found at Langley Park (TQ0082), near Slough, Bucks, VC 24. Langley Park contains many old oak trees and this RDB1 saproxylic crane fly turned up on one of the moth sheets during an unsuccessful search for the Heart moth. This is the first record for Bucks, but Windsor Forest is a known site for the species and here it also turned up at mercury vapour lamps during a Heart moth survey.

CHANDLER, P. J.—Galls and larvae of *Agathomyia wankowiczii* (Schnabl) (Platypezidae): a galled bracket of the fungus *Ganoderma applanatum* and photographs of such brackets *in situ* on a dead poplar *Populus nigra* trunk at Bressingham, Norfolk, 9.x.2002. This year's galls were present on the new pore surface, which had not completely covered the vacated galls on last year's

pore surface. Also exhibited were some larvae that had emerged from this bracket and a Danish specimen of the adult fly. The Norfolk site was visited en route to the Dipterists Forum autumn field meeting, following a report of its presence there in February 2002 during a bryological field meeting. The galled brackets were present on both the standing and fallen parts of a trunk that had snapped off at about 2m from the ground during the 1987 gale. The standing trunk had live brackets with this



Fig. 18. *Ctenophora ornata* Langley Park, Slough, Bucks, M. Albertini.



year's galls on the lower part, the galls being apparent on the fresh white pore surface; the upper part bore old dead brackets, all covered by vacated galls. The fallen part of the trunk also bore brackets covered with fresh galls. Each gall contains one larva, which leaves through an exit hole to pupate in the soil.

It is new to East Anglia but is now widespread in Kent and known from sites in Surrey, Sussex, Berkshire, Middlesex and one in Cheshire, having first been recorded in Britain at Wisley in 1990 by Brian Spooner. It may have arrived from the continent in the 1980s. A male and female from Stanmore Common, Middlesex exhibited in 2000 by John Dobson are still the only adult flies found in Britain. The perennial brackets of this fungus are conspicuous on dead wood of many trees and since the galls are also conspicuous it should be easy to record any further spread. The Norfolk occurrence may represent a separate introduction of the species to this country to that in the south east

DICKSON, R.—Two species of Syrphidae collected in 2002: *Callicera aurata* Rossi, Common Meadow (SU5810), S. Hants, VC 11, 28.vii, sunning itself on low herbage in a small area of unimproved herb-rich wet pasture but likely to have developed in a rot hole in the adjacent broad-leaved copse; *Xanthandrus conutus* (Harris), Swanwick Nature Reserve (SU5010), S. Hants, VC 11, 11.vi, at *Rosa* flowers—this species was found in reasonable numbers and on several dates, mostly at *Rosa* blossom.

GIBBS, D. J.—Miscellaneous Diptera collected in 2002: *Ctenophora pectinicornis* (L.) (Tipulidae), Shortwood, Gloucs, VC 33 (SO8308), 12.vi; *Gonomyia conoviensis* Barnes (Limoniidae), Culverhole Point, Devon, VC 3 (SY2789), 16.vii; *Leptonorplus walkeri* Curtis (Mycetophilidae), Lancaunt Nature Reserve, Gloucs, VC 34 (ST5496), 5.ix; *Atrichops crassipes* (Meig.) (Athericidae), Lord's Wood, Somerset, VC 6 (ST6363), 1.viii; *Oxycera terminata* Meig. (Stratiomyidae), Lord's Wood, Somerset, VC 6 (ST6363), 25.vi; *Orthoceratium lacustre* (Scop.) (Dolichopodidae), Lancaunt Nature Reserve, Gloucs, VC 34 (ST5496), 5.ix; *Rhaphium nicaus* (Meig.) (Dolichopodidae), Binnegar Quarry, Dorset, VC 9 (SY8788), 21.vii; *Callicera aurata* (Rossi) (Syrphidae), Shortwood, Gloucs, VC 33 (SO8308), 27.vi; *Rhingia rostrata* (L.) (Syrphidae), Lancaunt Nature Reserve, Gloucs, VC 34 (ST5396), 5.ix and Scotland Bank, Woodchester Park, Gloucs, VC 34 (SO8300), 2.viii; *Xylota florum* (F.) (Syrphidae), Lord's Wood, Somerset, VC 6 (ST6363), 25.vi; *Herina oscillans* (Meig.) (Ulidiidae), Culverhole Point, Devon, VC 3 (SY2789), 5.vii; *Urophora cuspidata* (Meig.) (Tephritidae), Watts Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT) Reserve (White Shute), Berks, VC 22 (SU3377), 11.vii; *Dicraeus scibilis* Collin (Chloropidae), Max Bog, Somerset, VC 6 (ST4057), 24.vi; *Botanophila lobata* (Collin) (Anthomyiidae), Max Bog, Somerset, VC 6 (ST4057), 1.vi; *Eustalomyia hilaris* (Fall.) (Anthomyiidae), Inkpen Common, Berks, VC 22 (SU3864), 28.vi; *Metopia staegerii* Rond. (Sarcophagidae), Binnegar Quarry, Dorset, VC 9 (SY8887), 15.vi; *Cylindromyia brassicaria* (F.) (Tachinidae), Binnegar Quarry, Dorset, VC 9 (SY8887), 22.vii; *Chrysosomopsis aurata* (Fall.) (Tachinidae) (Fig. 19), Scotland Bank, Woodchester Park, Gloucs, VC 34 (SO8300), second British record, 2.viii; *Paracraspedothrix monotivaga* Villeneuve (Tachinidae), Watts BBOWT Reserve (White Shute), Berks, VC 22 (SU3377), 11.vii.



Fig. 19. *Chrysosomopsis aurata* × 2, Woodchester Park, Gloucs, 2002, D. J. Gibbs.

HALSTEAD, A. J.—Some scarce or local Diptera collected in 2002: *Solva marginata* (Meig.) (Xylomyidae), Thorpe Hay Meadow, near Thorpe, Surrey (TQ030701), swept, 10.viii; *Neopachygaster meromelas* (Dufour) (Stratiomyidae), RHS Garden, Wisley, Surrey (TQ063591), riverbank wildlife area, swept, 26.vii; *Odontomyia tigrina* (F.) (Stratiomyidae), Papercourt Marshes, near Ripley, Surrey (TQ034562), swept, 8.vi; *Stratiomys potanida* Meig. (Stratiomyidae), Margy Pond, West End Common, near Esher, Surrey (TQ126637), swept, 21.vii; *Medetera griseascens* Meig. (Dolichopodidae), RHS Garden, Wisley, Surrey (TQ064580), in heated glasshouse, 14.ii, new to Britain, determined by C. E. Dyte; *Neoascia interrnta* (Meig.) (Syrphidae), Papercourt Marshes, near Ripley, Surrey (TQ034562), swept, 16.vi; *Platycheirus ocellatus* Goeldlin (Syrphidae), Papercourt Marshes, near Ripley, Surrey (TQ034562), swept, 16.vi; *Sphaerophoria rueppellii* (Wied.) (Syrphidae), Papercourt Marshes, near Ripley, Surrey (TQ034562), swept, 12.v; *Myopa strandi* Duda (Conopidae), Papercourt Marshes, near Ripley, Surrey (TQ034562), swept, 27.iv; *Meliera omissa* (Meig.) (Ulidiidae), Papercourt Marshes, near Ripley, Surrey (TQ034562), swept, 29.vi; *Acinia corniculata* (Zett.) (Tephritidae), Thorpe Hay Meadow, near Thorpe, Surrey (TQ030701), swept, female 28.vii and male 10.viii; *Enphranta toxonema* (Wied.), (Tephritidae), Papercourt Marshes, near Ripley, Surrey (TQ034562), swept, 12.v; *Ceratitis capitata* (Wied.) (Tephritidae), reared from larvae in fruit of apple imported from Portugal, emerged 14.viii; *Crataerina pallida* (Latr.) (Hippoboscidae), Wallington, Surrey (TQ296640), on Mrs J. Spenceley, 24.vi; *Gymnosoma rotundatum* (L.) (Tachinidae), RHS Garden, Wisley, Surrey (TQ063580), in poly tunnel, 5.viii.

HAWKINS, R. D.—Some flies from Surrey (VC 17) collected in 2002. From Ashted Common: *Rhingia rostrata* (L.) (Syrphidae), 13.vi at flowers of *Iris pseudacorus*; *Chrysotoxum verralli* Collin (Syrphidae), 13.vii in long grass by tree fallen over stream. From Effingham Common: *Callicera aurata* Rossi (Syrphidae), 28.viii, male on *Rubus* leaf at edge of woodland; *Myopites inulaedysentericae* Blot (Tephritidae), 27.vii on flowers of *Pulicaria dysenterica*; *Merzomyia westermanni* (Meig.) (Tephritidae), 27.vii, 2 males on *P. dysenterica* flowers and 28.viii, female on leaf of *Senecio crucifolius*; *Phasia obesa* (F.) (Tachinidae), 11.viii, male and female swept from long grass. From Brook, near Witley: *Subclytia rotundiventris* (Fall.) (Tachinidae), 22.ix, on bushes at roadside.

HODGE, P. J.—*Syntormon silvianum* Párvu (Dolichopodidae), a species that has been confused with *S. monile* (Haliday in Walker). Martins Wood, Ightham Mote, W. Kent (TQ5753), 13.vi.1990, 1 male; Petworth Park, W. Sussex (SU9523), 8.vi.1988, 1 male; Par Brook, Billingshurst, W. Sussex (TQ081249), 1 male, 1 female. Exhibited for comparison were two males of *S. monile*, Hatchet Pond, New Forest, S. Hants (SU368014), 14/15.vii.1990.

KNIGHT, G.—Species found during a survey on behalf of the Cumbria Wildlife Trust in 2002: *Hercostomus angustifrons* (Staeger) (Dolichopodidae), birch scrub at Drumburgh Moss, on the Solway Firth; *Rhamphomyia curvula* (Frey) (Empididae), Drumburgh Moss; *Criorhina floccosa* (Meig.) and *C. ranunuli* Panz. (Syrphidae), both from Hutton Roof Crags.

MORRIS, R. & BALL, S.—The status and distribution of *Volucella zonaria* (Poda) and *V. inanis* (L.) (Syrphidae) in Britain. Further to two papers on these species, to be published in this journal, graphs and distribution maps for both species were presented. Current evidence suggests that both species have exhibited further expansions in their ranges in 2002, but early indications are that both were much scarcer in that year than previously. New and detailed records were requested and it



was indicated that there were proposals to develop an interactive Web site to track their changing distribution.

PARKER, M.—A number of rare and local species collected in 2002: *Chorisops nagatunii* Rozkošný (Stratiomyidae), Higher Hyde Dorset Wildlife Trust Reserve, Dorset (SY8590), 21.vii, male and female swept from *Salix*; *Odontomyia ornata* (Meig.) (Stratiomyidae), West Sedgemoor RSPB Reserve, Somerset (ST3726), 29.vi, female swept from meadowland; *Villa cingulata* (Meig.) (Bombyliidae), Warburg BBOWT Reserve, Bix Bottom, Oxon (SU718882), 6.vii, male basking on low vegetation; *Thereva bipunctata* Meig. (Therevidae), west of Borgh, Isle of Berneray, North Uist, Western Isles (NF892808), 8.viii, male swept from a sand dune; *Brachypalpus laphriformis* (Fall.) (Syrphidae), Girdler's Coppice Dorset Wildlife Trust Reserve, Dorset (ST797134), 4.v, male at *Crataegus monogyna* flowers; *Cheilosia barbata* Loew (Syrphidae), Warburg BBOWT Reserve, Bix Bottom, Oxon (SU718882), 6.vii, a male and female at umbel flowers; *C. griseiventris* Loew (Syrphidae), Scrubbity Burrows, Cranbourne Chase, Dorset (ST9717), 18.v, female swept from a chalk grassland clearing within woodland; *C. latifrons* (Zett.) (Syrphidae), west of Borgh, Isle of Berneray, North Uist, Western Isles (NF892808), 8.viii, male swept from a sand dune; *C. soror* (Zett.) (Syrphidae), Warmwell Heath, Dorset (SY755872), 24.viii, one male swept from a large area of chalk deposits adjacent to the site; *Criorhina asilica* (Fall.) (Syrphidae), Scrubbity Burrows, Cranbourne Chase, Dorset (ST9717), 18.v, male at *Crataegus monogyna* flowers; *Microdon mmtabilis* (L.) (Syrphidae), Moyree Common, County Clare, Ireland (R3689), 30.v, female resting on an area of limestone pavement; *Neoascia geniculata* (Meig.) (Syrphidae), West Sedgemoor RSPB Reserve, Somerset (ST3726), 29.vi, male swept from meadowland; *Paragus constrictus* Šimic (Syrphidae), Carrowkeel, County Clare, Ireland (R3688), 27.v, a pair in copula; *Xanthandrus comtus* (Harris) (Syrphidae), Arinambane, Loch Eynort, South Uist, Western Isles (NF794285), 6.viii, female caught resting on *Fraxinus magellanica* in a small patch of non-native woodland; *Thecophora fulvipes* R.-D. (Conopidae), Warburg BBOWT Reserve, Bix Bottom, Oxon (SU718882), 6.vii, male caught on low vegetation.

PERRY, I.—A selection of uncommon Diptera found during 2002: *Dolichopus agilis* Meig. (Dolichopodidae), Ramparts Field, Suffolk, 18.vii, a male swept from dry grassy heath; *Poecilobothrus dicalis* (Loew) (Dolichopodidae), Orford, Suffolk, 13.viii, a male at edge of a brackish ditch; *Agathomyia cinerea* (Zett.) (Platypezidae), The Kings Forest, Suffolk, 25.ix, both sexes swept from ferns in *Betula* woodland, with females especially numerous and also found in a *Pinus* plantation elsewhere at the site; *A. woodella* Chandler (Platypezidae), The Kings Forest, Suffolk, 3.x, a female in *Alnus* carr and Wayland Wood, Norfolk, 13.x, a female swept from ancient deciduous woodland (both species were new to East Anglia); *Notiphila annulipes* Sten. (Ephydriidae), Loch Garten, Easternness, 23.vi, swept from *Carex* at edge of loch; *N. subnigra* Krivosheina (Ephydriidae), 23.vi, swept from *Carex* at edge of loch, first confirmed record from Scotland, as previous records had been based on females; *N. guttiventris* Sten. (Ephydriidae), Wicken Fen, Cambs, 24.vii, swept from emergent vegetation in a ditch; *N. umbrosa* Drake (Ephydriidae), Orford, Suffolk, 22.vii and 13.viii, single males in brackish ditch; *Eustalomyia hilaris* (Fall.) (Anthomyiidae), Wimpole Hall, Cambs, 7.viii, a female on a decrepit lime (*Tilia* species) tree in parkland; *Leucophora sericea* (R.-D.) (Anthomyiidae), The Kings Forest, Suffolk, a male swept from chalk heath; *Fannia ringhdahlana* Coll. (Fanniidae), The Kings Forest, Suffolk, 28.vii, amongst numerous other Diptera sheltering at the edge of damp *Alnus* carr, during a period of hot dry weather; *Lophosia fasciata* Meig.

(Tachinidae) (Fig. 20), East Wretham Heath, Norfolk, 20.vii, a male on an oak (*Quercus* sp.) tree in heathland.

SMITH, M. N.—Two uncommon species collected in 2002: *Atylotus rusticus* (L.) (Tachinidae), 19.vii, Marsh Gibbon, Oxon (SP6420), a single male dislodged while sweeping bankside vegetation, the first county record for this species, previously recorded in Britain only from Monks Wood, Cambs in 1828 and a small area of East Sussex around Lewes; *Callicera aurata* (Rossi) (Syrphidae), 15.viii, Hambledon, Surrey (SU9733), a female at teasel (*Dipsacus fullonum*) flowers at a disused brickworks.



Fig. 20. *Lophosia fasciata* × 2, East Wretham Heath, Norfolk, 2002. I. Perry.

## COLEOPTERA

BARCLAY, M. V. L.—Beetles of interest identified during 2002. *Ulonia culinaris* (L.) (Tenebrionidae), two examples taken in the Forest of Dean, Gloucestershire in 1973 by the late D. M. Womersley, apparently the second UK record for this species; *Otiorhynchus aurifer* Boheman (Curculionidae), Raynes Park, Surrey, TQ2269, this is the second UK locality for this naturalised species; *Otiorhynchus crataegi* (Germ.) (Curculionidae), Little Bookham, Surrey, TQ15, in garden and *Blaps unicolorata* Latreille (Tenebrionidae), Hastingwood, N. Essex, TL40, x.1996, on beam in old house, coll. G. Goddard.

BARCLAY, M. V. L. & MANN, D. J.—Beetles of interest from Chelsea Harbour and Chelsea Creek, Middlesex, TQ2676, 4.viii.2002. *Trixagus elateroides* (Heer) (Throscidae), *Hippodamia variegata* (Goeze) (Coccinellidae), *Rhizophius chrysomeloides* (Herbst) (Coccinellidae), *Chrysomela americana* (L.) (Chrysomelidae), *Otiorhynchus ligueus* (Olivier) (Curculionidae), *Otiorhynchus salicicola* Heyden (Curculionidae), *Otiorhynchus aruadillo* (Rossi) (Curculionidae) and *Polydrusus splendidus* (Herbst) (Curculionidae).

BOOTH, R. G.—(1) Wetland Insects Theme: some rare or notable beetles, including a species new to Britain, collected from a reservoir margin. Although many habitats can be lost when reservoirs are constructed and filled with water, their unengineered margins can provide a linear wet habitat which will be colonised by species often typically found at the sides of naturally occurring waterbodies. A selection from the 31 species found on open mud or among weed along a short stretch of Bewl Water, TQ6931, VC 16 [traditionally treated as part of E. Sussex, but shown as W. Kent in Dandy's 1969 *Watsonian Vice-Counties of Great Britain*], on a warm and sunny 18 July 2002: *Beubidiou obliquum* Sturm, *B. octonaculatum* (Goeze), *Pterostichus anthracinus* (Panz.) (Carabidae), *Acrotrichis heurici* (Matt.) (Ptiliidae), *Neobisnius procerulus* (Gravenhorst), *Tachyusa objecta* Mulsant & Rey, a species new to Britain, *Gypeta velata* (Erichson), *Aleochara brevipes* Graven. (all Staphylinidae) and *Atomaria gutta* Newman (Cryptophagidae).

(2) A selection of rare or notable species identified during 2002, including a species new to Britain. *Beubidiou univittum* (Fabr.) (Carabidae), Beddington sewage farm, Surrey, TQ2967, a single female from mud at the edge of a sludge settling bed, 30.iii.2002, an unusual inland record for this predominantly coastal/estuarine species and apparently the first for Surrey; *Ophonus rupicola* (Sturm) (Carabidae), Graveney



Marshes, Kent, TR0364, under old railway sleepers on embankment at base of sea wall, 11.iv.2002, a post-1970 record for East Kent; *Chlaenius nigricornis* (Fabr.) (Carabidae), Stodmarsh NNR, Kent, TR2362, a single male from wet vegetation, 12.iv.2002, a recent record for north-east Kent; *Hypopycna rufula* (Erichson) (Staphylinidae), Hackbridge, Surrey, TQ282660, a single female from a flight interception trap in the garden, 2–30.ix.2001; *Stemmus contumax* Assing (Staphylinidae), Broadnymett, Bow, North Devon, SS698014, in suction sample from cereal field (CABI Bioscience), 18.vii.2000 and other dates and locations, this species new to Britain has only recently, in 1994, been separated from *S. assequens* Rey, some records of which should now apply to the new species; *Brachynsa concolor* (Erichson) (Staphylinidae), Beddington sewage farm, Surrey, TQ2967, a single female from mud at the edge of a sludge settling bed, 30.iii.2002; *Biblopectus minutissimus* (Aubé) (Staphylinidae: Pselaphinae), North Wyke, Devon, SX653985, in suction samples from grazed field (CABI Bioscience), 4.vi.1999 and 22.v.2000, post-1970 records for Devon; *Amamronyx maerkelii* (Aubé) (Staphylinidae: Pselaphinae), Farthingloe, Dover, East Kent, in suction sample from grassland (CABI Bioscience), 26.viii.1999, possibly new to Kent; *Stenopelmus rufinus* Gyllenhal (Eirrhinidae), Askham Bog, Mid-West Yorkshire, SE5748, abundant on water fern *Azolla* in a dyke, 14.vi.2002, apparently the first Yorkshire record and *Tychius polylineatus* (Germar) (Curculionidae), Colekitchen Down, Gomshall, Surrey, TQ085489, a single female from suction sample from downland (CABI Bioscience), 8.vi.1999, the first modern British record.

(3) Separating females of the genus *Stenichmus* (Scydmaenidae). All scydmaenids are small, and many are difficult to identify. This is especially true of *Stenichmus* females as existing keys rely on very comparative characters, difficult to interpret without reliably named voucher material for comparison. For those prepared to dissect such small insects, the spermatheca provides valuable species specific characters. The exhibit consisted of mounted females of all British *Stenichmus*, with the exception of *S. godarti* Latreille, accompanied by pencil sketches of their spermathecae.

BOWDREY, J. P.—Some notable Coleoptera from Essex in 2002. *Badister dilatatus* Chaud. (Carabidae), Thorpe-le-Soken, TM173229, at house light, 30.vii.2002; *Agrius pannonicus* (Pill. & Mitt.) (Buprestidae), Lexden, TL9625, on oak trunk, 14.vi.2002, a new record for vice county 19; *Ctesias serra* (Fabr.) (Dermestidae), Thorpe-le-Soken, TM173229, on oak trunk, 26.vi.2002; *Cryptarcha strigata* (Fabr.) (Nitidulidae), Thorpe-le-Soken, TM173229, on sap run on oak trunk, 3.vii.2002; *Cryptarcha undata* (Fabr.) (Nitidulidae), Thorpe-le-Soken, TM173229, on sap run on oak trunk, 26.vi.2002; *Opatrum sabulosum* (L.) (Tenebrionidae), Holland-on-Sea, TM206164, on sandy cliff, 24.ix.2002, first post-1950 Essex record and *Podagricus fuscipes* (Fabr.) (Chrysomelidae), Prittlewell, TQ879875, on *Malva sylvestris*, 13.vii.2002.

COLLIER, M. J.—A few beetles found in Norfolk during 2002. *Hypomedon debilicornis* (Wollaston) (Staphylinidae), Wacton, TM1790, several by sieving large dung heap at riding school, 8.v.2002, a new county record; *Aleochara brevipennis* Gravenhorst (Staphylinidae), Cranwich Pits, TL7795, in pitfall trap, 25.iv.–12.v.2002, (det. confirmed R. C. Welch); *Limnichus pygmaeus* (Sturm) (Limnichidae), East Winch, TF6916, at edge of recent man-made clay-lined pond in horse-grazed paddock, 2.vi.2002, the first county record away from the Cromer cliffs area; *Nephus quadrimaculatus* (Herbst) (Coccinellidae), Thompson Common, TL9396, beating ivy 28.ix.2002, only the second definite county record; *Choragus sheppardi* Kirby (Anthribidae), East Harling Heath, TL9883, evening sweeping along ride in

coniferous plantation with deciduous borders, 29.vii.2002; *Bruchela rufipes* (Olivier) (Anthribidae), East Harling Heath, TL9883, sweeping ruderal vegetation on site of clear-felled coniferous plantation (heathland reclamation scheme), 7.vii.2002, a new county record; *Mognolones* (= *Centorhynchus*) *euphorbiae* (Brisout) (Curculionidae), Cranwich Pits, TL7795, sweeping waterside vegetation around disused sand pits, 2.vi.2002, a new county record; *Microplontus* (= *Centorhynchus*) *campestris* (Gyllenhal) and *Gymnetron villosulum* Gyllenhal (Curculionidae), Cranwich Pits, TL7795, sweeping waterside vegetation around disused sand pits, 2.vi.2002; *Anthrenomus piri* Kollar (Curculionidae), Thompson Common, TL9396, by beating crab apple *Malus sylvestris*, 28.ix.2002, the third county record and first since M.G. Morris found it on 25.ix.1970 at the same site and *Platypus cylindrus* (Fabr.) (Platypodidae), Thompson Common, TL9396, many boring into small oak *Quercus* stump, given away by large piles of frass, 12.v.2002.

DICKSON, R. J.—Two beetles new to Hampshire. *Epiphannus cornutus* Esch. (Eucnemidae), Botley Wood, S. Hants, SU5309, beaten from Field Maple at dusk by D. M. Appleton (there was some stacked timber nearby), 19.vi.2002 and *Lixus scabricollis* Boheman (Curculionidae), Hook shore (part of Hook Lake LNR), S. Hants, swept off *Beta* and *Atriplex*, 21.viii.2002, det. D. M. Appleton.

GIBBS, D. J.—Nine species of Coleoptera collected in southern England. *Bembidion saxatile* Gyllenhal (Carabidae), Culverhole Point, S. Devon, SY2789, 16.vii.2002; *Chlaenius nigricornis* (Fabr.) (Carabidae), Pawlett Hams, N. Somerset, ST2642, 1.v.2002; *Hydrovatus chypealis* Sharp (Dytiscidae), Pawlett Hams, N. Somerset, ST2642, 1.v.2002; *Lomechusa emarginata* (Paykull) (Staphylinidae), Binnegar Quarry, SY8788, Dorset, 21.vii.2002; *Prionocyphon serricornis* (Müller, P. W. J.) (Scirtidae), Shortwood, E. Glos, SO8208, 12.vi.2002; *Prionychus melanarius* (Germar) (Tenebrionidae), Shortwood, E. Glos, SO8208, 12.vi.2002; *Oncomera femorata* (Fabr.) (Oedemeridae), near Siccaridge Wood, SO9303, E. Glos, 19.iv.2002; *Plateumaris affinis* (Kunze) (Chrysomelidae), Max Bog, N. Somerset, ST4057, 1.iv.2002 and *Epitrix atropae* Foudras (Chrysomelidae), Shortwood, SO8208, E. Glos, 12.vi.2002.

HAWKINS, R. D.—Specimens of the 12 species of *Cantharis* (Cantharidae) occurring in Surrey (VC17), including one very local species and some colour varieties taken in 2002. *C. figurata* Mannerheim, Ashted Common, 13.vi., females on grass and beaten from sallow adjacent to damp grassland and Blindley Heath, 14.vi., two males beaten from oak on damp grassy common; *C. rufa* L., Ashted Common, 13.vi., male with black elytra; *C. livida* L., Ashted Common, 13.vi., female with black elytra and *C. thoracica* (Olivier), Blindley Heath, 14.vii., female with pale stripe along suture. Also typical specimens of these and the remaining species.

HODGE, P. J.—(a) Four species of Coleoptera collected in southern England in 1994, 1998 and 2002, including two species not previously recorded from the British Isles. *Manda mandibularis* (Gyll.) (Staphylinidae), Bewl Water (south bank), \*W. Kent, TQ69653157, 15.vi.2002; *Neobisnius procerulus* (Grav.) (Staphylinidae), Bewl Water (north bank), W. Kent, TQ69373220 and Bewl Water (south bank), \*W. Kent, TQ69653157, 15.vi.2002; *Tachyusa objecta* Muls. & Rey (Staphylinidae), Bewl Water (north bank), W. Kent, TQ69373220, and Bewl Water (south bank), \*W. Kent, TQ69653157, 15.vi.2002, the first British records; *Atheta linderi* Brisout de Barneville in Grenier (1863) (Staphylinidae), Barle Valley near Dulverton, S. Somerset, SS868306, female in *Polyporus* fungus on ash stump, 16.vi.1994 and Newhaven cliff, E. Sussex, TQ448000, several in pigeon droppings on floor of disused radar emplacement, 8.iv.1998, the first British records. [\* traditionally treated as part of E. Sussex, but shown as W. Kent in Dandy's 1969 *Watsonian Vice-Counties of Great Britain*].



(b) 22 species of longhorn beetles (Cerambycidae) collected in the Algarve, Portugal between 1998 and 2002. The names and taxonomic order follow Vives (2000 & 2001). Five species also occur in the British Isles (*Gracilia minuta* (Fabr.), *Pseudovadonia livida* (Fabr.), *Melanoleptura scutellata* (Fabr.), *Steuirella melaura* (L.) and *Steuirella nigra* (L.)). *Gracilia minuta* (Fabr.), near Moncarapacho, 18.iv.2000 and Barao de São Miguel, 30.iv.2001, apparently rare in Portugal; *Stenopterus mauritanicus* Lucas, near Moncarapacho, 8/15.iv.1999; *Certallus ebulinus* (L.), Barranco Velho, 5.v.1998 and near Moncarapacho, 11.iv.1999; *Deilus fugax* (Olivier), Javali, one swept in flowery meadow, 17.iv.2000; *Clytus rhannus* (Germar), 2 km east of Bensafrim, 7.v.2002; *Chlorophorus trifasciatus* (Fabr.), near Moncarapacho, 9/12.iv.1999 and Praia de Alvor, 5.v.2002; *Pseudovadonia livida* (Fabr.), 1 km south of Odelouca, 8.v.1998 and Praia Verde, 13.iv.1999; *Melanoleptura scutellata* (Fabr.), Serra de Monchique east of Picota, 30.iv.2002, female on low herbage, scarce in Algarve; *Aredolpona fountenayi* (Mulsant), Lagos, 8.v.2002; *Nustera distigma* (Charpentier), 1 km south of Odelouca, 8.v.1998 and Praia Verde, 13.iv.1999; *Steuirella melaura* (L.), 1.5 km north of Porto de Lagos, 3.v.2002, local in Algarve; *Steuirella nigra* (L.), 6 km north of Bensafrim, 9.v.2002; *Iberodorcasion lusitanicus* (Chevrolat), Sagres, 5.v.2002, one under *Ononis*, confined to south-west of Iberian peninsula, mainly in Algarve, Portugal; *Calanobius filius* (Rossi), north of Castro Marim, 9.v.1998, and near Moncarapacho, 9.iv.1999; *Agapanthia annularis* (Olivier), Portela, R. de Odeleite flood plain and near Moncarapacho, on thistles, 11.iv.1999; *Agapanthia asphodeli* (Latreille), 5 km north of Ameixial, on *Asphodelus*, 19.iv.2000, locally common in Algarve; *Agapanthia cardui* (L.), north of Castro Marim, 9.v.1998 and 2 km east of Bensafrim, 6.v.1998; *Opsilia caerulescens* (Scopoli), Serra de Monchique, Foia 900 m, 8.v.1998, near Moncarapacho, 9.iv.1999 and 2 km west of Aljezur, 29.iv.2001; *Opsilia uolybdaena* (Dalman), Quinta de Marim, Olhao, 3.v.1998 and 12.iv.2000 and Portela, R. de Odeleite flood plain, 11.iv.1999; *Phytoecia erythrocuema* Lucas, Lagos, one on *Daucus carota*, 9.v.2002; *Phytoecia rufipes* (Olivier), 2 km east of Bensafrim, 6.v.1998, very localised in Algarve and *Phytoecia virgula* (Charpentier), near Moncarapacho, 11.iv.1999.

LEVEY, B.—Some rare and notable Coleoptera. *Harpalus quadripunctatus* Dejean (Carabidae), Glenmore Forest Park, Easternness, NH9709–9809, on sparsely vegetated sandy and gravelly moraine, 31.v.2002; *Lionychus quadrillum* (Duft.) (Carabidae), Seaton, E. Cornwall, SX2954, in coarse shaley sand near seepage at base of cliff, 28.vii.2001; *Gymnetron beccabungae* (L.) var *fallax* Hoffman (Curculionidae), Loch Eye, East Ross, NH8480, 26.v.2002, this variety with all black elytra does not appear to have previously been recorded from the British Isles and *Tychius parallelus* Panzer (Curculionidae), Glenmore Forest Park, Easternness, NH9709, 25.v.2002.

PHILP, E. J.—A printed copy of a new electronic label list for British Coleoptera, in taxonomic order, and also an index in alphabetical order.

TELFER, M. G.—Personal highlights of 2002. *Dyschirius politus* (Dejean) (Carabidae), Wangford district, W. Suffolk, viii.2002; *Tachys uicrus* (Fischer von Waldheim) (Carabidae), Eype's Mouth, Dorset, 4.v.2002; *Agonum sexpunctatum* (L.) (Carabidae), Crossways, Dorset, 20.vii.2002, beside new sand and gravel pits with pools; *Amara montivaga* Sturm (Carabidae), Wangford district, W. Suffolk, viii.2002; *Amara praetermissa* Sahlberg, C. R.) (Carabidae), Overstrand, E. Norfolk, 6.vii.2002, second record for this site; *Amara strema* Zimm. (Carabidae), Potman's Heath, E. Kent, 10.iii.2002; *Bradycellus csikii* Laczó (Carabidae), Barnhamcross, W. Suffolk, 13-14.iv.2002, 8 specimens recorded; *Stenolophus teutonus* (Schrank) (Carabidae), Crossways, Dorset, 20.vii.2002, beside new sand and gravel pits with pools; *Acupalpus exiguus* Dejean (Carabidae), Potman's Heath, E. Kent, 10.iii.2002;

*Acupalpus maculatus* Schaum (Carabidae), Dungeness RSPB reserve, E. Kent, recognised as new to Britain on 26.iii.2002 from specimens collected in previous years by MGT and John Paul at the ARC gravel pits; *Licinus depressus* (Payk.), (Carabidae), Barnhamcross, W. Suffolk, 13–14.iv.2002; *Licinus punctatulus* (Fabr.) (Carabidae), Ferrybridge, Dorset, 7.ix.2002; *Badister peltatus* (Panzer) (Carabidae), Thompson Common Norfolk Wildlife Trust (NWT) reserve, W. Norfolk, 7.vii.2002; *Sphaerius acaroides* Walzl (Sphaeriidae), Eype's Mouth, Dorset, 4.v.2002; *Georissus crenulatus* (Rossi) (Hydrophilidae), Eype's Mouth, Dorset, 4.v.2002, one specimen cloaked in mud (as they are in the field) and one with the mud cleaned off; *Tasginus ater* (Graven.) (Staphylinidae), Wangford district, W. Suffolk, viii.2002; *Curimopsis maritima* (Marsham) (Byrrhidae) Eype's Mouth, Dorset, 4.v.2002; *Athous campyloides* Newman (Elateridae), Overstrand, E. Norfolk, 6.vii.2002, a new county record; *Trixagus carinifrons* (de Bonv.) (Throscidae), Monks Wood NNR, Hunts, from the Rothamsted Insect Survey light trap set on the southern edge of the wood; *Cantharis thoracica* (Olivier) (Cantharidae), Thompson Common NWT reserve, W. Norfolk, 7.vii.2002; *Lycoperdina succincta* (L.) (Endomychidae), Foxhole Heath roadside, W. Suffolk, 13.vii.2002, one of two specimens on unripe *Lycoperdon* puffballs by torchlight at night; *Diaperis boleti* (L.) (Tenebrionidae), Monks Wood NNR, Hunts, from the Rothamsted Insect Survey light trap set on the southern edge of the wood; *Chrysolina sanguinolenta* (L.) and *Psylliodes sophiae* Heikertinger (Chrysomelidae), Wangford district, W. Suffolk, viii.2002 and *Cassida nebulosa* L. (Chrysomelidae), Wangford district, W. Suffolk, viii.2002, on Fat Hen *Chenopodium album* L.

WHITTON, P.—(1) Species of *Dyschirius* and *Clivina* (Carabidae) collected between 1965 and 2002. *Dyschirius aeneus* (Dejean), Barton-on-Sea, S. Hants, SZ227931, on damp undercliff, 15.iv.1995; *D. angustatus* (Ahrens), Dungeness, E. Kent, TR065184, on bank of small gravel-pit, 10.v.2000; *D. globosus* (Herbst), Chimney, Oxon, SU354998, in ditch at edge of unimproved meadow, 20.v.1988; *D. impunctipennis* Dawson, Holkham, E. Norfolk, TF892461, at edge of drainage channel on beach, 25.vi.2002; *D. leandersi* Wagner, near Westhay Moor, N. Somerset, ST453435, in peat cutting, 20.iv.1995; *D. nitidus* (Dejean), Wampool Estuary, Whitrigg, Cumberland, NY226575, on sandy bank of estuary, 4.vi.1998; *D. obscurus* (Gyll.), Dungeness, E. Kent, TR065184, on bank of small gravel-pit, 10.v.2000; *D. politus* (Dejean), Barton-on-Sea, S. Hants, SZ227931, on damp undercliff, 15.iv.1995; *D. salinus* Schaum, Salthouse, E. Norfolk, TG076445, on bare sand in saltmarsh, 26.vii.1994; *D. thoracicus* (Rossi), Holme Nature Reserve, W. Norfolk, TF722448, on bare soil at edge of saltmarsh, 28.vii.1994; *Clivina collaris* (Herbst), Gressingham, N. Lancs, SD581699, on bank of R. Lune, 5.vi.1998 and *Clivina fossor* (L.), Abridge, S. Essex, TQ468975, under loose turf in field, 14.iv.1965.

(2) A selection of the 100 species of ground beetles (Carabidae) recorded from Otmoor, Oxfordshire. *Dyschirius leandersi* Wagner, SP561141, in damp mud beside drainage ditch, 17.viii.1991; *Lasiotrechus discus* (Fabr.), in deep crack in muddy bank of drainage ditch, SP574150, 12.viii.1991; *Bembidion varium* (Olivier), on bare damp mud, SP561141, 17.viii.1991; *B. gilvipes* Sturm, SP580143, in grass tuft, 13.ii.1998; *B. quadripustulatum* A.-S., SP560141, on damp mud, 18.vii.2000; *Pterostichus anthracinus* (Panzer), SP573137, in drainage ditch; 14.viii.1991; *P. longicollis* (Duft.), SP562145, in pitfall trap, 27.iv–19.v.2000; *P. macer* (Marsham), SP564146, in flood refuse, 20.i.1999; *Symachus vivalis* (Illiger), SP563145, in pitfall trap, 23.vii–15.viii.2000; *Anara lunicollis* Schiödt, SP562139, in grass tuft, 30.xi.1997; *Ophonus ardosiacus* Lutschnik, SP568131, under soil in set-aside field, 14.vi.1992; *Acupalpus exiguus* Dejean, SP580143, at edge of ditch, 13.ii.1998; *A. parvulus* (Sturm),



SP561141, in grass tuft, 25.ii.2000; *Anthraxus consputus* (Duft.) and *Badister meridionalis* Puel, SP563145, in damp soil at base of bund, 2.vi.2000; *B. mipustulatus* Bonelli, SP584143, in grass tuft beside ditch, 2.ii.2000; *Lebia chlorocephala* (Hoffm.), SP561141, in grass tuft, 20.ii.2000 and *Dromius meridionalis* Dejean, SP564146, in flood refuse, 3.xi.1998.

(3) A copy of an English Nature Research Report: "The conservation ecology of the ground beetle *Badister meridionalis* Puel (Coleoptera: Carabidae)" based on research carried out on Otmoor by the exhibitor between April 2000 and January 2001 and containing 92 carabid species.

## HEMIPTERA

BROOKE, S. E. & NAU, B. S.—Fen litter bugs found at Flitwick Moor, Bedfordshire, mid-September 2002, including *Buchananiella continna* (White) (Anthocoridae), ca 20 adults, two fifth instar nymphs and one teneral adult in sedge stacks; *Xylocoris galactinus* (Fabr.) (Cimicidae), two in sedge stacks; *Lycocoris campestris* (Fabr.) (Cimicidae) two nymphs, three adults and one teneral adult. Exhibit of ongoing study of *Gerris gibbifer* (Schummel) (Gerridae) in garden pond in Toddington, Bedfordshire, since 1999.

DICKSON, R.—*Pinalitus cervinus* (H.-S.) (Lygaeidae), Warsash shore, SU4905, S. Hants, VC 11, beaten from ivy blossom at night, 2.x.2002 (4 specimens); Titchfield Haven NNR, SU4302, S. Hants, VC 11, ivy blossom at night, 9.x.2002 (2 specimens); Hook Lake LNR, SU4804, S. Hants, VC 11, swept 21.viii.2002; *Lygus rugulipennis* Poppius (Lygaeidae); Common Meadow, SU5810, S. Hants, VC 11, swept 14.viii.2002, 21.ix.2002 and 25.ix.2002; Wickham Common, SU5810, S. Hants, VC 11, swept 12.vii.2002; Botley Wood, SU 5510, S. Hants, VC 11, mv lamp, 23.viii.2002; *Lygus pratensis* (L.) (Lygaeidae) Wickham Common, SU5810, S. Hants, VC 11, swept after dusk, 19.iv.2002, swept from hay meadow 29.ix.2001, swept 5.x.2001 (2 specimens).

GIBBS, D.—*Rhopalus maculatus* (Fabr.) (Lygaeidae), Binnegar Quarry, Dorset, SY8987, 15.vi.2002; *Macrosaldnla scotica* (Curtis) (Saldidae), Binnegar Quarry, Dorset, SY8987, 15.viii.2002; *Cixius emicnlarinus* (L.) (Cixiidae), Shortwood, SO8208, 27.vi.2002.

HAWKINS, R. D.—Uncommon bugs taken in recent years, including one new to Britain: *Megacoelum beckeri* (Fieber) (Miridae), Frensham Common, Surrey, 31.viii.1998, on pine; *Anthocoris ampicollis* Horváth (Anthocoridae), Riddlesdown, Surrey, 21.ix.1995, on low growth of oak at edge of mixed deciduous wood (including ash), previously only found on ash in north Yorkshire; *Psallus psendoplatani* Reichling (Miridae), Sunbury Park, Middlesex, 21.vi.2001, male and female beaten from sycamore, new to Britain, associated with sycamore, dissection of male genitalia is necessary to separate it from related species on oak and field maple; *Aphrophora alpina* Melichar (Cercopidae), Thundry Meadows NR, Elstead, Surrey, 27.vi.2002, in marsh surrounded by alders and willow bushes, but apparently with no sweet gale (*Myrica gale*), its reputed food plant.

HODGE, P.J.—A specimen of *Nysius senecionis* (Schilling) (Lygaeidae), swept off Common Fleabane *Pulicaria dysenterica* growing in a meadow beside Breech Pool, Pagham Harbour LNR, W. Sussex, SZ87699783, on 7.viii.2002 [there was no sign of Ragwort *Senecio jacobaea* (the usual host plant) growing at this site].

JONES, R.—*Chlamydatus evanescens* (Boheman) (Miridae), four specimens taken by suction sampler from green "eco-roofs" at Canary Wharf, together with many

specimens of *C. pullus* (Reuter) and *C. saltitans* (Fallén). *C. evanescens*, which feeds on *Sedum*, has been previously recorded only from Great Orme area (19th century) and Dovedale (early 20th century). Roofs were laid in 1999–2001 as matting impregnated with *Sedum* plants; some matting is imported from Poland, so true native status of colonies remains in doubt.

NAU, B. S.—Exhibit on Heteroptera recording in Bedfordshire. Key statistics include: 370 species recorded (65% of British list), with average of 174 species per 10 km<sup>2</sup>, five squares have over 200 species and richest square has 304 species. Distribution maps exhibited of *Aelia acuminata* (Fabr.) (Pentatomidae), *Palouena prasiina* (L.) (Pentatomidae), *Schirus luctuosus* (Mulsant & Rey) (Cydnidae) and *Eurydema oleracea* (L.) (Pentatomidae).

STUBBS, A. E.—*Platyneutopius nudatus* (DeGeer) (Cicadellidae), Narborough Railway Line NR, TF7511, West Norfolk, 17.vii.2002, one female, calcareous grassland/scrub transition; as reported in the Society's journal (Vol. 15, p. 125), this species had not been recorded in Britain for some 50 years.

## HYMENOPTERA

ARCHER, M.—(1) Some British bees and wasps taken in 2001. Pompilidae: *Priocnemis coriacea* Dahlbom, 22.v, Rauceby Warren, Lincs. Sphecidae: *Gorytes tinnidus* (Panz.), 21.viii, Rauceby Warren, third record for Lincs. Andrenidae: *Andrena cineraria* (L.) 22.v, Rauceby Warren, second record for Lincs. *A. triumnerana* (Kirby), female, 14.iv, male 10.iv, Sark, Channel Islands. Halictidae: *Sphecodes rubicundus* von Hagens, 2.vii, Highgate Common, Staffs. Anthophoridae: *Nomada fuscicornis* Nylander, 12.iv, Sark, Channel Islands; *N. latiburiana* (Kirby), 22.v, Rauceby Warren, second record for Lincs.; *Melecta albifrons* (Forst.), 28.iv, Helmsley Castle, third record for Yorks. Apidae: *Bombus jouellus* (Kirby) 21.v, Messingham Sand Quarry, Lincs.

(2) Some eumenid wasps taken in Europe in recent years. Eumenidae: *Microdynerus longicollis* Morawitz, 17.vi.1999, north of Collodi, Pietrabuona, Tuscany, Italy; *M. tinnidus* (de Saussure), 6.viii.1993, St Cernin de l'Herm, Dordogne, France; *Euodynerus posticus* (H.-S.), 15.viii.1993, near Soulaures, Dordogne, France; *E. uotatus* (Jurine), 11.v.1997, Lajosmizse, Hungary; *Odynerus rotundigaster* de Saussure, 8.iv.1988, Markriyalos, Crete; *Eumenes pseudunculatus* (Panz.), female, 1.viii.1990, La Reole, Gironde and male, 17.v.1998, Belle-de-Montagne, Avergne, Haute Loire, France; *Aucistrocerus auctus* (F.), female, 16.viii.1979, La Turballe, Loire-Atlantique and male, 7.viii.1993, St Cernin de l'Herm, Dordogne, France.

GIBBS, D.—Some aculeate Hymenoptera taken in 2002. Chrysididae: *Hedychrum nieueelai* Linsenmaier, female, 15.viii, Binnegar Quarry, Dorset SY8887. Sphecidae: *Cerceris quinquefasciata* (Rossius), female, 21.vii, male 15.viii, Binnegar Quarry, Dorset. Andrenidae: *Andrena tibialis* (Kirby), female 29.iii, Troopers Hill, Bristol, Glos. ST6273. Halictidae: *Lasioglossum malachurum* (Kirby), female 24.iv, Hinton Hill, S. Glos. ST7376; *L. quadrimaculatum* (Kirby) females 15.vi and 22.vii, Binnegar Quarry, Dorset; *Sphecodes spinulosus* von Hagens, 31.v, Watts BBOWT reserve (White Shute), Berks SU331772. Anthophoridae: *Nomada ferruginata* (L.), female, 16.iv, Swillbrook Lakes, Glos., SU0293.

HALSTEAD, A. J.—Some scarce or local sawflies and aculeate wasps taken mostly in 2002. Cimbicidae: *Cimbex femoratus* (L.), female of the all yellow form, 29.vii, in a garden, Pyrford, Surrey, TQ037594; *C. conatus* Schrank, female, col. Mrs J.



Donovan, 19.vi, a squashed specimen found under alders in a supermarket car park where larvae had been seen in the two previous years, Barton, near Torquay, Devon, SX907666; *Trichiosoma sorbi* Htg., male, col. J. Bratton, on *Sorbus aucuparia*, 27.vi.2001, above Aber Falls, Cwm yr Afon Goch, Gwynedd, SH675591. Argidae: *Arge berberidis* Schrank new to Britain (Fig. 21), in gardens on *Berberis thunbergii*, male, 24.v, Stevenage, Herts., TQ266231, female, 7.vi, Church Langley, Essex, TL470094. Tenthredinidae: *Loderus prateus* (Fall.), female, swept from *Equisetum*, 12.v, Paper-court Marshes, near Ripley, Surrey, TQ034562. Pompilidae: *Aulopus carbonarius* (Scop.), female, 10.vii, on a stone wall, off Fulham Road, London SW10, TQ264782. Sphecidae: *Gorytes bicinctus* (Rossius), female, swept, 10.viii, Thorpe Hay Meadow, near Thorpe, Surrey, TQ030701.

KNIGHT, G. T. = Some Hymenoptera found during survey work in 2002. Work carried out by Liverpool Museum included a survey with the Countryside Council for Wales (CCW) of invertebrates on soft rock cliffs in north Wales, a survey of Drumburgh Moss NNR on the Solway Firth and limestone pavements at Hutton Roof Crags for the Cumbria Wildlife Trust, and visits to Dyfi NNR, Ceredigion. The last site produced an unusual colour form of a male *Cimbex femoratus* (L.)



Fig. 22. *Cimbex femoratus*  $\times 0.75$ , Dyfi NNR, Ceredigion, 2002, G. Knight.

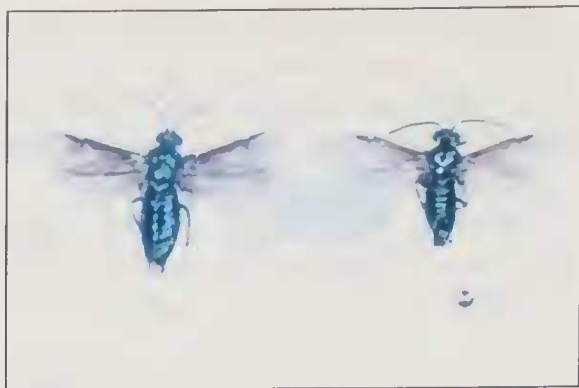


Fig. 21. *Arge berberidis*, female, Church Langley, Essex (left); male, Stevenage, Herts. (right), 2002, A. J. Halstead.  $\times 1.5$ .

(Cimbicidae) found dead under birch scrub at Cors Fochno, Dyfi NNR, SN630920, by the CCW warden, Mike Bailey, on 23.vi. The specimen had a broad red band across the abdomen (Fig. 22). Other sawflies of the Tenthredinidae family were *Periclista pubescens* (Zaddach), female, 11.iv, at Hutton Roof Crags, Cumbria, SD5578 – a considerable northern extension to its recorded distribution; *Dolerus liogaster* Thomson, female, 13.v, also at Hutton Roof Crags; *D. uegapterus* Cam., female, 25.iv, Drumburgh Moss NNR, Cumbria, NY246591; *Croesus varus* (Villaret), 21.v, Drumburgh

Moss NNR, Cumbria, NY2559. Aculeate Hymenoptera from N. Wales were Tiphidae: *Tiphia viivuta* Van der Linden, female, 19.vi, Porth Dinllaen, Caer., SH279408, *Methocha articulata* (*iclmemurouoides*) Latr., male and female, 18.vi, Porth Ceiriad, Caer., SH315248. Eumenidae: *Odynerus uelanocephalus* (Gmelin in Linnaeus), male and female, 27.vi, Porth Neigwl, Caer., SH290257, found nesting in level clay on soft cliffs with *O. spinipes* (L.)—previously only known in Wales from S. Glamorgan. Andrenidae: *Andrena ocreata* (Christ), female, 27.vi, Porth Neigwl, Caer., SH290257. Megachilidae: *Osmia xanthomelana* (Kirby), male and female, col. C. Clee in 1998 at an undisclosed locality in N. Wales. This RDB1 bee was previously thought to be restricted to the Isle of Wight until discovered by Carl Clee in N. Wales. Work is continuing with CCW to monitor populations, searching for additional sites and investigating the bee's autoecology.

PARKER, M.—A RDB1 ruby-tailed wasp, *Chrysis fulgida* L. (Fig. 23), female, pootered off a telegraph pole, 20.vii.2002 at Goathorn Farm, Studland Heath, Dorset, SZ014851. This wasp is believed to be associated with aspen. There have been a few recent records from Surrey and Hampshire but this is the first Dorset record since 1941.



Fig. 23. *Chrysis fulgida*  $\times 1.5$ , Studland Heath, Dorset, 2002, M. Parker.

#### DICTYOPTERA

GIBBS, D.—One of the native cockroaches, *Ectobius pallidus* (Ol.) taken on 5.vii.2002 at Goat Island, Axmouth, Devon, SY2789.

#### ORTHOPTERA

PORTER, J.—A male specimen of the bush cricket, *Meconema meridionale* Costa, Chessington, Surrey, 21.ix.2002, found inside the 'Pyrex' bowl over the bulb of a moth-trap four hours after the trap had been switched off and examined. The insect has previously been noted on car bonnets and other mild heat sources in Europe and was first recorded in Britain two miles from Chessington in 2001.

WILSON, M. R.—A female of the scaly cricket, *Pseudomogoplistes vicentae* Gorochov from the West Pembrokeshire colony that was discovered in 1999. This is the third colony discovered in the British Isles, the others being on Chesil Beach, Dorset and Branscombe, Devon. Specimens from these sites and from Sark, Channel Islands will be used for molecular studies to provide information on the isolation of these populations.

#### GENERAL

FARLEY, R.—A display of Field Studies Council publications including recent AIDGAP keys. The principal objectives of the AIDGAP project are to identify those groups of animals and plants for which the difficulty in identification is due to an absence of a simple, accurate key rather than being due to insuperable taxonomic problems and, subsequently to produce simple, well-written aids to identification. A significant feature of the project is the testing of new keys before final publication, by potential users. Feedback from these users is used to amend the keys before publication. Members were invited to volunteer to help with testing and to suggest possible subjects for future guides.

HARMER, A. S.—A selection of photographs of famous lepidopterists to be included in the forthcoming book provisionally entitled *The Cabinet of Curiosities—an Arnelian Anthology* written and compiled by Michael Salmon and Peter Edwards. The competition to name the most lepidopterists and to win a free copy of the book was won by Mr Grahame Parker and Mr Mark Calway.

SALMON, M. A.—A synopsis of chapter headings and topics covered in *The Cabinet of Curiosities—an Arnelian Anthology*.

SIMPSON, M.—The Simpson Collection of Entomological Memorabilia. Examples of collecting equipment, old catalogues, dealers' price lists and letters relating to entomology. Members were requested to forward suitable material they no longer required to help build up the collection.